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ABSTRACT

This package includes a description of Nova University's Human Resource Development (HRD) core seminar and seven doctoral student papers. The description (by Warren Groff) explains how a major curriculum change was made to convert the vocational, technical, and occupational specialization seminar, Personnel-Human Resources Development, to the core seminar, Human Resources Development (HRD). The conceptual framework for the HRD core seminar involved an audit of HRD within the student's work context, a vision of a strategic direction and preferred scenario for an area of responsibility within each student's work context, and creation of a multiyear HRD action plan. An important issue for the Ed.D. Programs for Higher Education was seen to be assembling the critical mass of HRD Systems Engineers who would design and implement forms of alternative education that would produce a critical mass of high performance learners and leaders who could create learning communities in an advanced technical era. Appendixes include 24 references and the 7 student papers: "An Analysis of Governance Structure of the Amarillo Hospital District and Northwest Texas Hospital" (Richard Pullen); "Strategic Planning: Delivery of Quality Care through Nursing's Commitment to Quality Improvement" (Pullen); "Goals: Implementation of a Program to Enhance Nursing Commitment to Total Quality Improvement at NTH" (Pullen); "An Analysis of Human Resource Development at Arkansas Technical University" (Kathryn D. Pearson); "A New Vision for Elementary School Mathematics at Arkansas Tech University" (Pearson); "The Restructuring of Developmental Mathematics at Arkansas Tech University" (Pearson); and "Vision 2000: A Pedagogy Shift--Critical Thinking and Caring. Strategic Human Resource Development Plan for Restructuring Nursing Department Curriculum, Southwest Missouri State University, West Plains Campus" (Juanita J. Roth). (YLB)

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TOWARD THE 21st CENTURY: PREPARING PROACTIVE VISIONARY TRANSFORMATIONAL LEADERS FOR BUILDING LEARNING COMMUNITIES

HUMAN RESOURCE DEVELOPMENT

by

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U.S. DEPARTMENT OF EDUCATION
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TOWARD THE 21st CENTURY:
PREPARING PROACTIVE VISIONARY TRANSFORMATIONAL LEADERS FOR BUILDING LEARNING COMMUNITIES

by

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Winter 1993

Abstract

The ultimate purpose of graduate and postgraduate education is to design programs to promote improvement in the quality of services that are provided in a variety of different contexts and systems -- health and human services, business and industry, government and public service, and education and training.

Nova University was founded in 1964. The Ed.D. Programs for Higher Education (PHE) were started in 1972 with a focus on preparing community college personnel. That single program evolved into three areas of specialization: (a) Higher Education; (b) Adult Education; and (c) Vocational, Technical, and Occupational (VTO) Education. The VTO specialization consisted of two seminars: Personnel - Human Resources Development (P-HRD) and the Emergence of Vocational, Technical, and Occupational (E-VTO) Education.

A curriculum change was made in 1990 which involved the (1) conversion of P-HRD to the core seminar Human Resources Development beginning fall 1990, (2) addition of Leadership as a sixth core seminar beginning fall 1991, (3) addition of a VTO Trends and Issues specialization seminar for second year students beginning 1992, (4) elimination of Learning Theory as a core seminar, and (5) reduction of the number of practicums from five to four.

Governance and Management has been a core seminar for many years. G & M had a focus on three major units of study (1) the structural dimension - governance and governance processes, (2) the human dimension - human interaction and organizational behavior, and (3) the strategic dimension - strategic planning, managing, and evaluating.

Human Resources Development (HRD) as a core seminar acknowledges the centrality of learning and the systemic nurturing of human resources. This paper describes a few developmental tasks in creating High Performance Learners and Leaders for **Building Learning Communities**.

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- B. Developmental Mathematics by Kathryn D. Pearson
- C. Critical Thinking in Nursing by Juanita J. Roth

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> In the end, it is important to remember that we cannot become what we need to be by remaining what we are.
>
> Max De Pree. Leadership Is An Art. NY: Doubleday, 1989.

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INTRODUCTION

* * * * * * * * * *

CREATIVE ORGANIZATIONAL PROTOTYPES

> I believe that there exists a possibility for a type of organization so fundamentally more creative than the traditional, authoritarian hierarchy that it is only dimly reflected, even in the most successful, current practitioners of new management principles.
>
> Peter Senge. Sloan School of Management, Massachusetts Institute of Technology.

* * * * * * * * * *

ABCs of 3 Rs: Rethinking for Restructuring and Revitalizing

A. Agricultural Era

During the Agricultural Era, the United States had education for the elite who attended private schools and colleges for the privileged destined for the professions. Apprenticeship training was available for people who were destined to become craftsmen. The U.S. invented the "common" elementary school and spread it, first in urban areas and then in rural areas. Then, the U.S. invented secondary education and spread it in a similar manner.

B. Business Industrial Era

The transition from an agricultural era to the business and industrial era was based on low technology and know-how and took place over a long period of time.

As the U.S. emerged during the business and industrial era, the vocational track was added to the academic track. A general track was added to accommodate students whose needs were not met in the academic and vocational tracks.

Major **expansion** occurred in the 1940s and 1950s in all sectors of the economy, particularly manufacturing and services. Rapid advances in science and technology yielded global competition and **modernization** at an accelerating rate. Establishments that survived, modernized with new technology in the 1960s and early 1970s. During the late 1970s and the early 1980s, it became apparent that modernization of industrial era establishments was necessary, but insufficient. The manufacturing sector establishments that survived modernized several times with contemporary technology and then began to **restructure.** More important, however, establishments began to recognize the centrality of Human Resources Development committed to Total Quality and Benchmarking Standards.

Alternative education has been available since the beginning of time. There have always been two forms of education: (1) direct experience and (2) that which is transmitted from a member of a species to another via communications. Alternative education made considerable advances with the inventions of paper, movable type, mail, telegraph, telephone and telecommunications.

An analysis of alternative education for a workshop for the Department of Education of Arkansas in 1989 yielded the following: contemporary traditional eduction (CTE), partial technological deschooling (PTD), collaborative lifelong learning (CLL), solution based learning (SBL), and other education and training providers (ETP) such as corporations. PTD includes distant learning systems. Technology intensive delivery systems were described in Any Home A Classroom (Halperin, 1984) and The Education Utility (Gooler, 1986). In 1984, New York Institute of Technology announced it was possible to complete a four-year degree program via personnel computer and modem. Nontraditional education today will be traditional education tomorrow.

Although the manufacturing sector of the economy began to fundamentally restructure in the 1980s, the service sector of the economy is lagging behind other sectors of the economy. Two extremely costly services are health and education. Health care made up 5.3% of the Gross National Product (GNP) in 1960, then climbed to 9.5% in 1980 and almost 14 % by 1990. With regard to education, the U.S. ranks second in terms of expenditure for elementary and secondary education and ranks last in math and near last in all categories of science among industrialized nations. Health and education will be modernized and restructured. The key issues are what form and by whom.

C. Cognitive Synapses and Electronic Networks

Over the past several years, leaders have begun to realize the centrality of the brain to the critical technology of learning. During the 1980s, major advances in research and development yielded communication and information technologies that have made it possible to transmit date, video, and voice instantaneously and simultaneously almost anywhere in the world.

Curriculum designers must produce High Performance Learners and Leaders by (1) achieving greater efficiency from contemporary programs and (2) inventing bold, "break the mold" solution based learning paradigms.

A. AGRICULTURAL ERA

People	**Education-Training**	**Outcomes**
Elite	Schools and Colleges	"Professions"
Others	Apprenticeships	Craftsmen

B. INDUSTRIAL ERA

Privileged	Academic	Quality
	Vocational	
	General	
Disadvantaged	Drop-out	Inequality

C. ADVANCED TECHNICAL ERA

Any location a learning environment

RETHINKING, RESTRUCTURING, REVITALIZING

FROM POST - INDUSTRIAL ERA (PIE)

TO

EARLY TECHNICAL ERA (ETE)

TO

ADVANCED TECHNICAL ERA (ATE)

1970s 1980s 1990s 2000s 2010s

CORE SEMIARS

A major curriculum change was made at the meeting of the Higher Education Director's Team in February 1990. The decision involved the (1) conversion of the vocational, technical, and occupational (VTO) specialization seminar Personnel-Human Resources Development to the core seminar Human Resources Development (HRD) beginning fall 1990, (2) addition of Leadership as a sixth core seminar beginning fall 1991, (3) addition of a VTO Trends and Issues specialization seminar for second year students beginning 1992, (4) elimination of Learning Theory, and (5) reduction of the number of practicums from five to four.

Leadership

Research indicates that leadership consists of three processes: (1) analysis, (2) visions, and (3) action plans: can occur at three levels: (1) self, (2) organizational, and (3) societal: and involves three sets of competencies: (1) conceptual, (2) interactive, and (3) technical.

As intitially conceptualized, the Leadership seminar was intended to (1) include research and theory, (2) provide an opportunity for creating visions and preferred scenarios and (3) require each student to experience the setting of strategic directions and translating them into broad stroke organizational development components and human resources development (OD + HRD) components. For example, assume a student had an interest in creating a student success program. What are the OD and HRD components?

Governance and Management

Governance and Managment has been a core seminar for many years. An early version of the seminar consisted of (1) a focus on the forces which shape the missions of establishments, (2) an analysis of governance structure, and (3) a review of the processes by which establishments determined strategic directions and scope of work. The third unit traced the evolution of planning, management, and evaluation systems to the development of strategic planning.

The Governance and Management seminar from 1986 through 1991 emphasized (1) the structural dimension, (2) the human dimension, and (3) the work dimension - application of strategic planning. The 1992-93 G & M seminar emphasized (1) governance structure, (2) governance processes, and (3) scope of work - strategic planning.

Organizational development projects students have selected include the form and structure of strategic planning, student learning outcomes assessment systems, management information systems, and Total Quality....

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Human Resources Development

Human Resources Development has its origins in Personnel - Human Resources Development (P-HRD) which was one of two seminars in the vocational, technical, and occupational specialization. The other specialization seminar is the Emergence of Vocational, Technical, and Occupational Education (E-VTO). P-HRD and E-VTO complemented each other very well in that the first had a focus on the workforce of the future and the other had a focus on the workplaces of the future. The seminar was flexible enough to accommodate professionals employed in education and training in a variety of contexts: health and human services, business and industry, government and the military, and schools and colleges.

HRD consists of three major topics: (1) an audit of HRD in the context in which each student works, (2) creating a vision for an area of responsibility, and (3) developing a multi-year HRD action plan for the vision.

Content projects have included communication skills, computational skills, outcomes based education, science, technology, etc. Process topics included critical thinking, learning styles, problem solving, Total Qualitv...., etc. A student could select Total Quality and specify OD dimensions in G & M and the human dimensions in HRD.

Societal Factors

Societal Factors helps each student understand the demographic, social, economic, technological, and political variables that shape mission, purposes and program services.

Curriculum and Program Planning

A curriculum is the sum total of learning experiences that include (1) content formats, (2) delivery system formats, and (3) student learning outcomes formats.

Problem Solving

The Research and Evaluation core seminar introduces each student to three problem solving methodologies which are applied in practicums: (1) developmental, (2) evaluation and (3) research.

A Developmental Task

To what extent are HRD concepts emphasized throughout seminars and other learning experiences? How is cohesion and integration acheived relative to HRD concepts?

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LEADERSHIP

THEORY AND RESEARCH

VISION AND PREFERRED SCENARIO

STRATEGIC DIRECTIONS

(ORGANIZATIONAL & HUMAN RESOURCES DEV COMPONENTS)

GOVERNANCE & MANAGEMENT

AUDIT

VISION OF G & M

ACTION PLAN

HUMAN RESOURCES DEVELOPMENT

AUDIT

VISION OF HRD

ACTION PLAN

STRATEGIC THINKING: MAXIMUM SYNERGISM =

LEADERSHIP THROUGH

OD + HRD + TQC

Pre Program Audit	Year 1	Year 2	Year 3	Year 4	Year 5	Post Program Audit
Organizational Development						
Mission Primary Program Secondary Program Climate/Culture Institutional Effectiveness						
Human Resources Development						
Conceptual Interactive Technical						
Hoped for Outcomes	←				→	Actual Outcomes

HUMAN RESOURCES DEVELOPMENT

1. AUDIT HRD

MISSION
PHILOSOPHY
POLICIES
FUNCTIONS
BUDGET

2. VISION

STRATEGIC DIRECTION
PREFERRED SCENARIO
ORGANIZATIONAL DEVELOPMENT PLAN

3. HRD PLAN

CONCEPTUAL SKILLS
HUMAN RELATIONS SKILLS
TECHNICAL SKILLS
BUDGET

VOCATIONAL, TECHNICAL, AND OCCUPATIONAL SPECIALIZATION

For several years the VTO specialization consists of two seminars: Personnel - Human Resources Development (P-HRD) and the Emergence of Vocational, Technical, and Occupational Education (E-VTO). During the 1980s, PHE analyzed the format for the delivery of the specialization seminars. A new format was designed and implemented in 1984. The new format linked the specialization seminars to the Summer Institute. Students received materials in winter and completed assignments during the spring term prior to the Summer Institute (SI), participated in SI activities that consisted of theme and specialization sessions, and then produced a synthesis paper following the SI.

Each of the four two-year cycles is described in a paper. The 1984-1985 cycle dealt with **preparing agents of change** (ED 272 247). The 1986-1987 cycle had a focus on **preparing transformational leaders** (ED 290 860). The 1988-1989 cycle concentrated on **preparing strategic thinkers** (ED 319 882). The third cycle paper included a six year summative evaluation with recommendations for the next six years. The paper included a detailed plan for "Designing Information Age Learning Paradigms (DIALP)" and having an online option by cycle six in 1994-1995. Cycle 4 consisted of P-HRD in 1990 and E-VTO in 1991 and focused on preparing tranformational leaders who think strategically about **fundamental restructuring** of establishments created in the industrial era (ED 335 519). E-VTO 1992 focused on preparing strategic thinkers in VTO education for **Building Learning Communities.** Trends and Issues 1992 focused on a coherent and integrated philosophy of VTO and visions and scenario creation.

E-VTO and T & I

Emergence of Vocational, Technical, & Occupational Education helps each participant to understand more fully the past and present in order to anticipate the future through the leadership process of analysis, vision and action (AVA) plan creation. E-VTO emphasizes evolution to anticipate impact on access, cost, productivity, quality, restructuring, revitalizing, synchronizing, and thinking globally.

Trends and Issues helps each participant to analyze and to synthesize prior learning to better understand "self" and work context in order to create a vision and multi-year action plan with organizational development and human resources development components in harmony with each other and in synchronization with workforce and workplace needs in the context of the participant's work site. The vision and action plan will be co-created (AVA II) with peers for refinement at the summer institute during which time national leaders address various trends and issues.

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ERAS

PAST

PRESENT

FUTURE

ISSUES

ACCESS
COST
PRODUCTIVITY
QUALITY
RESTRUCTURING
REVITALIZING
SYNCHRONIZING
THINKING GLOBAL

"FUTURE PULL" PLANNING

	Creation	Co-Creation
ANALYSIS	External Environment (Past, Present, Future) Internal Environment (Past, Present, Future)	
VISION		
ACTION PLAN		

HIGH PERFORMANCE LEARNER AND LEADER

Ultimate Purpose

The ultimate purpose of graduate and postgraduate education is to design programs to promote improvement in the quality of services that are provided in a variety of different contexts and systems -- health and human services, business and industry, government and public service, and education and training.

Human Resources Development Systems

Human Resources Development Systems Design Engineers (HRDSDE) have two challenges: (1) to achieve greater efficiency from contemporary programs and (2) to invent new more effective solution based learning paradigms.

Outcomes: Output and Impact

The National Center for Higher Education Management Systems (NCHEMS) specified outcomes as output of the enterprise and impact on society. **Rethinking for Restructuring and Revitalizing** provides an opportunity to reexamine the ultimate outcomes for a contemporary program and to specify what the ultimate outcomes should be for any new outomes oriented solution based HRD system.

There are two orientations for graduate programs: (1) one based on an understanding of theory in order to produce an individual skilled in basic research and (2) another one based on an understanding of exemplary practice grounded on good research in order to produce an individual skilled in applications. Nova University altered the course of education reform by developing an applications-oriented format to parallel a research-oriented format. The research format consists of about 2/3rds didactic contact with research-oriented faculty and 1/3rd in basic research in the form of a dissertation. The applications format for the Programs for Higher Eduction consists of about 1/3 didactic contact with applications and research oriented faculty, about 1/3 in small scale applications in the form of practicums, and about 1/3 large scale applications for the Major Applied Research Project (MARP).

An ultimate outcome of PHE is a vision and multi-year action plan based on strategic thinking and principles of maximum synergism - leadership through organizational development and human resources development with Total Quality Commitment to Benchmark Standards.

VTO HRDSDE must analyze economic and technological variables to anticipate changes in **workplaces of the future** and **workforce competencies and skills.**

ORIENTATIONS

THEORY AND RESEARCH

PRACTICE AND APPLICATIONS

RESEARCH FORMAT

2/3 DIDACTIC	**1/3 RESEARCH**

APPLICATIONS FORMAT

1/3 DIDACTIC	**1/3 SMALL SCALE APPLICATIONS**	**1/3 LARGE SCALE APPLICATIONS**

Occupational Analysis

The Census Bureau collects information about employment outlook using ten major categories, four of which are labeled goods (agriculture, mining, construction, and manufacturing) and six of which are services (finance, government, transportation and utilities, self-employed, wholesale and retail, and services). The ten categories of economic establishments are a composite of many types of businesses including manufacturing (#4) and services (#9).

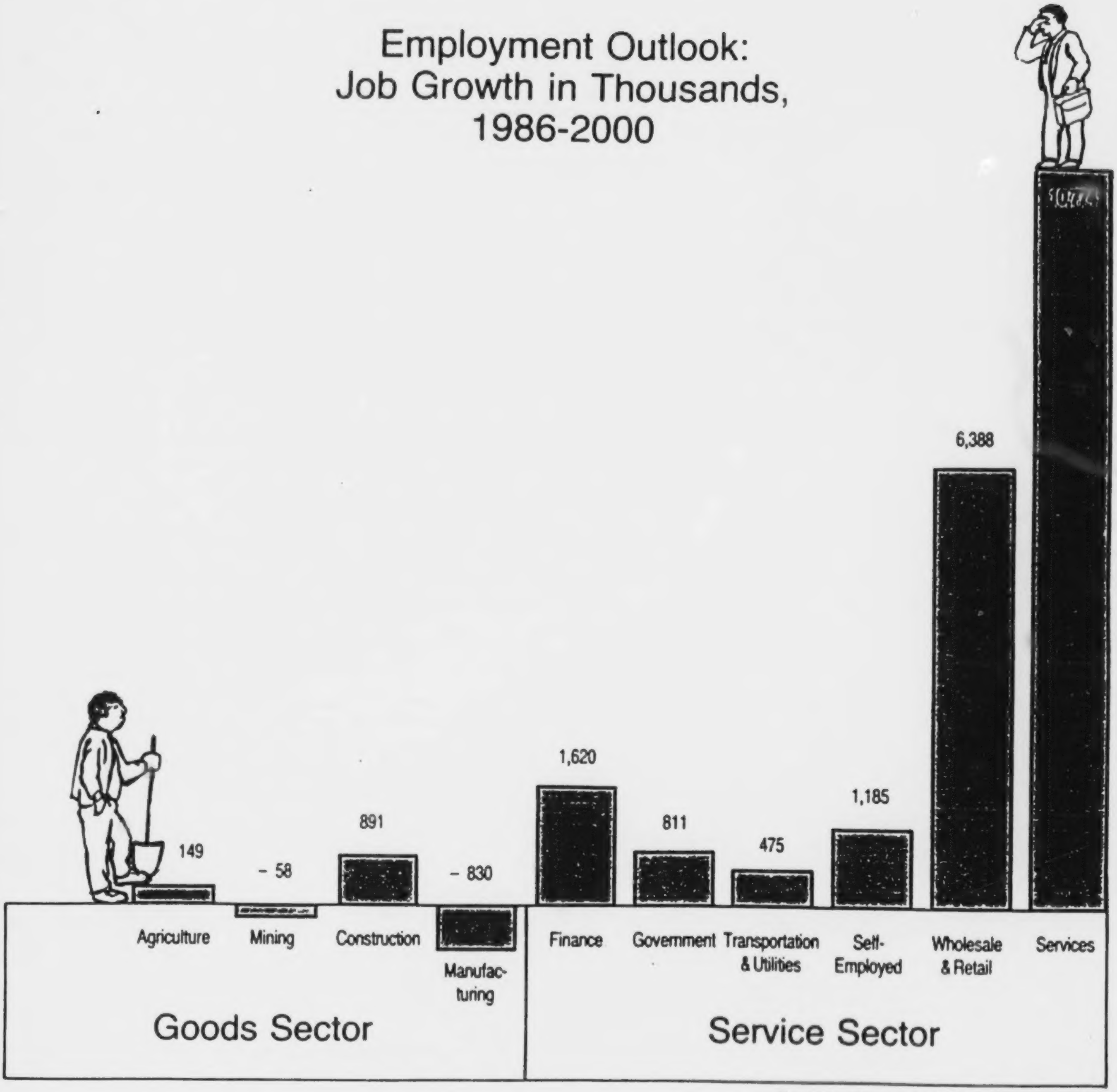
Three areas in manufacturing that are essential to the viability of the U.S. are #8 printing and publishing, #9 electic and electronic, and #19 instruments. Desktop publishing is revolutionizing the printing and publishing industry. A doctoral student in VTO who is a "prepress" faculty member in postsecondary education could create a "Professional Development Plan" with goals and objectives that include (1) better understanding advances in research and development, (2) transfer of technology to workplaces, (3) competencies and skills needs for high performance learners and workers in prepress or press operations, and (4) curriculum and student learning outcomes assessment. The ultimate outcome of such a PDP could be better insights about horizontal and vertical curriculum integration within contemporary traditional education and synchronization with workplace needs through a next generation tech-prep program.

Curriculum Development

Competency based education and training is an outgrowth of the "systems approach" consisting of inputs, process, and outcomes. Education focused primarily on inputs during the industrial era and made the transition to process during the early technical era. During the advanced technical era, the focus will be on outcomes.

How would a student begin to envision the curriculum for the preparation of a prepress or press operator High Performance Learner or Worker for the advanced technical era? What materials standards, like ISO 9000, would have to be in the curriculum? Will learning only take place within the contemporary traditional schools or colleges or will other HRD systems be more efficient and/or effective? What parts of the curriculum can be delivered via multi-tech systems or through collaborative lifelong learning, solution based learning, or outcomes oriented models? What genuine partnerships must be created to synchronize the output of the education industry with workforce and workplace needs in an advanced technical era?

Employment Outlook:
Job Growth in Thousands,
1986-2000



Source: Bureau of Labor Statistics, 1987

ECONOMIC ESTABLISHMENTS

1. Agricultural services, forestry, fisheries
2. Mining
3. Contract construction
4. Manufacturing
5. Transportation & public utilities
6. Wholesale trade
7. Retail trade
8. Finance, insurance, real estate
9. Services
10. Non-classified

MANUFACTURING (#4) ESTABLISHMENTS

1. Food & Kindred Products
2. Tobacco
3. Textile Mill Products
4. Apparel & Other Textile Products
5. Lumber & Wood Products
6. Furniture & Fixtures
7. Paper & Allied Products
8. Printing & Publishing
9. Chemical & Allied Products
10. Petroleum & Coal Products
11. Rubber & Misc. Plastic Products
12. Leather & Leather Products
13. Stone, Clay & Glass Products
14. Primary Metal Industries
15. Fabricated Metal Products
16. Machinery, Except Electrical
17. Electric & Electronic Equipment
18. Transportation Equipment
19. Instruments & Related Products
20. Miscellaneous Manufacturing Industries
21. Administrative & Auxiliary

SERVICES (#9) ESTABLISHMENTS

1. Hotels & Lodging Places
2. Personnel Services
3. Business Services
4. Auto Repair Services
5. Miscellaneous Repair Services
6. Amusement & Recreational Services
7. Health Services
8. Legal Services
9. Educational Services
10. Social Services
11. Museums, Botanical, Zoological
12. Membership Organizations
13. Miscellaneous Services
14. Administrative & Auxiliary

#4. MANUFACTURING

#8. PRINTING AND PUBLISHING

- LITERACY, PRODUCTIVITY AND DEMOCRACY
- EQUALITY AND QUALITY

#9. ELECTRIC AND ELECTRONIC

#19. INSTRUMENTS

#9. SERVICES

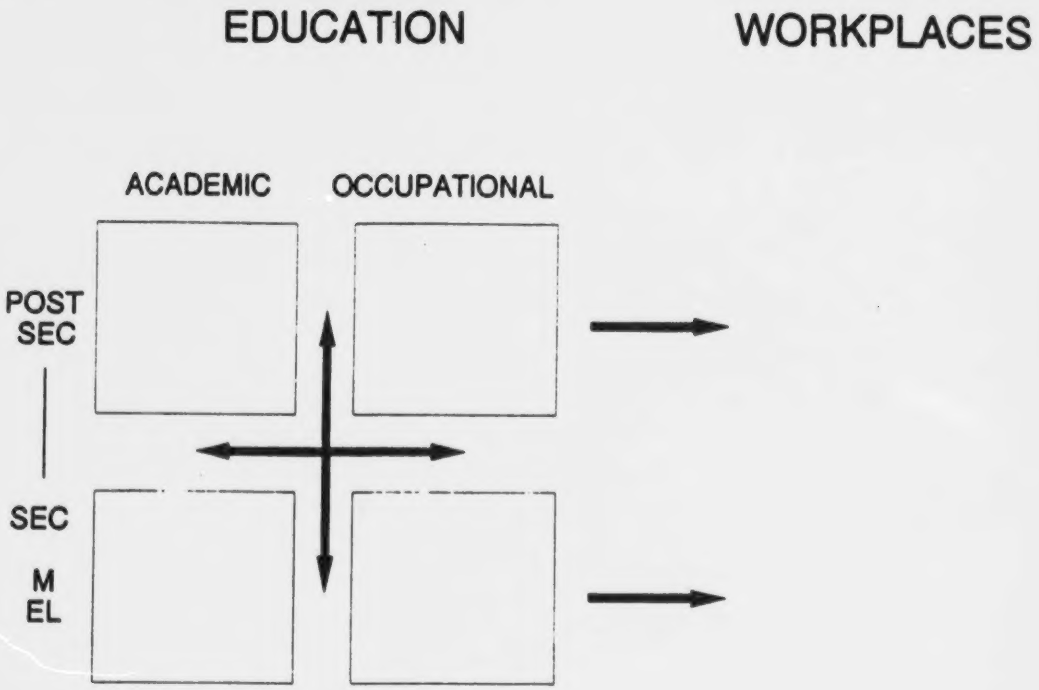
#7. HEALTH SERVICES

- ACCESS, COSTS, AND QUALITY

#9. EDUCATION SERVICES

- WOMB TO TOMB "FULL SERVICE"

#10. SOCIAL SERVICE



EDUCATION

WORKPLACES

ACADEMIC

OCCUPATIONAL

POST
SEC

SEC

M
EL

NEXT GENERATION TECH-PREP PROGRAM

	YEAR 1	YEAR 2	YEAR 3
REFINEMENT 1. AUDIT 2. INTEGRATION 3. "CLINICAL"			
DISSEMINATION 1. TRAINING 2. TECHNICAL ASSISTANCE 3. REPLICATION			
EVALUATION			

Solution Based Multi-Tech Learning

Competency based education and training is rooted in the philosophy of education, particularly vocational education. Down through the ages, education has had three major purposes that relate to the development of each person as a worker, a citizen, and an individual. Vocational education has pioneered curriculum development that leads an apprentice through a series of developmental stages from a novice to a skilled craftsperson. Scouting is outcomes oriented in the series of developmental stages from "Tenderfoot" and "Second Class" through "Eagle" and "Explorer." Industrial era schools and colleges tend to place more emphasis on process variables than outcomes. Variables such as the Carnegie unit, seven periods per day, five day weeks, 180 day years, head count reimbursement formula, and compliance regulations are more quantitative process than qualitative outcomes measures.

Just as Nova University pioneered an applications format for producing a new type of problem solver in the space age, so too Nova is pioneering the solution based multi-tech formats to produce an outcomes oriented Learner and Leader. The Center for Computer and Information Sciences offers Computer Based Learning (CBL) master's, doctoral, and certificate programs through the UNIX operating system so that each student can complete much of their learning via personal computer at home or work. The Child and Youth Studies (CYS) program implemented a multi-tech format in 1991 and started the fourth cluster. CYS begins with orientation to doctoral studies; an introduction to technology; and a seminar in which each student analyzes work context and problems, creates a Professional Development Plan to maximize her/his learning while in the program, and specifies issues for two problems.

PHE implemented Curriculum and Program Planning (CPP) as an on line option in 1992-93. In addition, PHE offered a new specialization in Computing and Information Technology. PHE can pioneer the next generation multi-tech format with a series of seminars on the journey to "Explorer" status solution based learning. Because of the centrality of human resources, HRD should be the lead core seminar in which each student would gain a better understanding of self, work context, and create a PDP with a vision and action plan. HRD would be followed by Societal Factors, Problem Solving, and Specialization I. This base of information would be the foundation for CPP, Leadership, Governance & Management, and Specialization II.

* * * * * * * * * *

One cannot cross the ocean
without losing sight of the shore.

MULTITECH DELIVERY SYSTEM

SUMMER				SUMMER
HUMAN RESOURCES DEVELOPMENT	X---X---X---X---X---X			X
SOCIETAL FACTORS		X---X---X---X---X---X		X
PROBLEM SOLVING METHODOLOGIES			X---X---X---X---X---X	X

MULTITECH DELIVERY SYSTEM

SUMMER				SUMMER
CURRICULUM	X---X---X---X---X---X			X
LEADERSHIP		X---X---X---X---X---X		X
GOVERNANCE & MANAGEMENT			X---X---X---X---X---X	X

CONCLUSION

PHE has added HRD to the series of core seminars. The HRD core seminar description is stated as follows:

> This seminar treats the development of human resrources within organizations. Contemporary theory, research and practice are explored. The quest to improve organizational effectiveness ultimately rests on the philosophical conviction that people are the essential capital assets. Thus, the seminar views the more effective organization of the future in terms of the strong relationship between organizational development and human resources development strategies.

The conceptual framework for the HRD core seminar consists of (1) an audit of HRD within the student's work context, (2) a vision of a strategic direction and preferred scenario for an area of responsibility within each student's work context, and (3) the creation of a multi-year HRD action plan including conceptual, interactive, and technical skills with budget estimates for implementation.

First, the HRD faculty must facilitate the seminar from the heart because the course is the soul of PHE. Second, PHE must make a Total Quality Commitment to Human Resources Development. Third, PHE must develop a multi-tech option. The HRD core seminar should be the first seminar in the multi-tech format so that each student can understand more fully the centrality and create a Professional Development Plan for maximizing growth throughout PHE.

Numerous issues will be important in the 1990s. No issue will be more important, however, than assembling the critical mass of Human Resources Development Systems Engineers who will design and implement forms of alternative education which will produce a critical mass of intellectual capital, High Performance Learners and Leaders, who can create Learning Communities in an Advanced Technical Era.

* * * * * * * * * *

CREATING SOMETHING NEW AND FRESH

> The major task for society and the economy is to create something new and fresh as opposed to just improving on the old.

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APPENDICES

A. Quality Improvement in Nursing by Richard Pullen

B. Developmental Mathematics by Kathryn D. Pearson

C. Critical Thinking in Nursing by Juanita J. Roth

* * * * * * * * * * *

A "Third Wave" Electronic College

Judith W. Leslie uses Toffler's The Third Wave to develop an educational institution in an advanced technical era dominated primarily by electronic media.

> This methodology would allow the learner to proceed at his/her own rate and style, within his/her own time period, at his/her desired location, drawing upon learning materials from throughout the country and the world. Computer science and electronics courses and programs of study would be an integral part of the curriculum. Faculty would be cross-trained in a variety of disciplines and teaching styles. They would have flexible work schedules and loads and might share an assignment with a spouse or colleague. Many faculty would instruct from their home or electronic cottage....
>
> Judith W. Leslie. "As The Third Wave Approaches Higher Education: Planning For the Electronic Institution." CAUSE/EFFECT, January 1981, Vol. 4, No. 1, p. 15.

AN ANALYSIS OF GOVERNANCE STRUCTURE OF THE AMARILLO HOSPITAL DISTRICT AND NORTHWEST TEXAS HOSPITAL

Governance and Management

by:

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Northwest Texas Hospital

Anita Barrett, Ph.D.

Dallas Cluster

A Professional Paper presented to Nova University
in partial fulfillment of the requirements
for the degree of Doctor of Education

Nova University

September 1992

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An Analysis of Governance Structure of the
Amarillo Hospital District and
Northwest Texas Hospital

Introduction

Northwest Texas Hospital, a subdivision of the Amarillo Hospital District, functions as an acute care hospital licensed for 250 beds that is accredited by the Joint Commission on Accreditation of Hospitals. Services include general medicine, surgery, obstetrics, gynecology, pediatrics, pediatric critical care, adult critical care, regional emergency receiving and trauma care in the Amarillo Emergency Receiving Center, and outpatient services to qualified indigent population of Amarillo at the Pickens Center. The Pavilion of Northwest Texas Hospital provides in-patient and out-patient psychiatric and chemical dependency services to adults and adolescents. The purpose of this professional paper is to examine the governing structure of Northwest Texas Hospital and the Amarillo Hospital District.

Locus of Centralized Control

The Amarillo Hospital District was created by passage of House Bill 70 in 1959. The District was established for the purpose of owning and operating a hospital or hospital system for indigent and needy purposes, including the community hospital for private and indigent patients owned by Potter and Randall Counties.

House Bill 70 provides that the governing body of a city shall appoint a Board of Managers to manage, control, and administer the hospital or hospital system. In addition, the governing body shall levy a tax for the purpose of paying the interest on and creating a fund for bonds; providing for the operation and maintenance of the hospital system; and making further improvement and additions to the hospital system.

Northwest Texas Hospital and the Amarillo Hospital District were created by the voters and can only be dissolved by the voters. There is no religious, profit, empire building, or self-serving motive. The hospital is owned by all citizens, not just groups with vested interests. The citizens of Potter and Randall Counties elect officials to serve as commissioners who govern the upper echelon of the organizational hierarchy. Northwest Texas Hospital is a non-profit organization governed by the Amarillo Hospital District which appoints a Board of Managers, sets the tax rate, and approves the hospital budget. The Board of

Managers in turn appoints the Chief Executive Officer; responsible for operations and financial integrity of the institution. The Board of Managers of the hospital is directly accountable to these city commissioners.

The Hospital District is a community-owned hospital and may be viewed from the theoretical perspective of General Systems Theory. Northwest Texas Hospital is an open system meeting the physical and psychosocial needs of the community. A system is a set of interacting and interrelated parts that produce a cohesive unit maintaining a steady state (Bolman & Deal, 1991). Sources of input include material, money, human effort, and information into the hospital system while products, services, human satisfaction, and organizational survival and growth are sources of output favoring negentropy.

The Board of Managers supervises the hospital's activities and has the authority, for cause, at any time, to suspend a member, restrict the privileges of a member, and to reassign staff as deemed necessary. The Board directly polices physician conduct that is conducive in achieving and maintaining quality patient care. Membership in the Medical Staff of Northwest Texas Hospital is a privilege which is extended only to professionally competent physicians, dentists, and podiatrists who continuously meet specified qualifications and standards of care. The Chief Executive Officer, Senior Vice President of Operations, and Senior Vice President of Financial and Information Services are directly accountable to the Board of Managers, establishing the vital link between the Strategic Apex and the Operating Core of Northwest Texas Hospital. This assists in providing quality care to all patients at Northwest Texas Hospital and the Amarillo Hospital District.

Mission Statement and Strategic Plan

Organizations normally serve a specific societal function or an enduring need of the society. Astute top-level managers build upon the professed societal contribution of the organization by relating specific organizational tasks and activities to higher purposes (Schermerhorn, Hunt, & Osborn, 1988). The missions of Northwest Texas Hospital and the Amarillo Hospital District incorporate these ideas of service to society. The mission statement for Northwest Texas Hospital (Appendix A) expresses a collaborative relationship between patients, their families, and physicians in the restoration of wellness. State of the art technology with caring and respect for human dignity as the foundation for all services rendered is emphasized.

The mission statement for the Amarillo Hospital District (Appendix B) encompasses an open systems approach to caring for the general population. Quality patient care is delivered to all individuals regardless of the ability to pay. The goal is to maintain individual dignity and self worth.

According to Smith, Piland, & Funk (1992), many health care executives believe in the inherent worth of strategic planning, although there is limited evidence documenting that strategic planning is effective. This is not the current scenario affecting Northwest Texas Hospital, which is experiencing dynamic change as a result of strategic planning (Appendix C). A heart catheterization lab and a children's hospital will be constructed consisting of 85 beds and 85,000 square feet. Additionally, Northwest Texas Hospital is of purchasing Saint Anthony's Hospital, a 300-bed general hospital that has been in operation since 1901. As a result the organizational structure of Northwest Texas Hospital will be amended to meet this new challenge. Northwest Texas Hospital will meet these challenges as opportunities to continue as a leader of health care in the city of Amarillo and Panhandle region.

Organizational and Committee Structure

According to Brown (1972), the general hospital establishes a unique relationship between the formal authority of position, as represented by the administrative hierarchy, and the authority of knowledge, as represented by the medical practitioners and other professionals. There are two organizational charts at Northwest Texas Hospital that incorporate concepts from Mintzberg's Structural Configuration Model (Bolman & Deal, 1991). The first organizational chart (Appendix D) shows the relationship of the strategic apex to the technostructure and support staff, while the second organizational chart (Appendix E) shows the relationship of the Vice President of Patient Services to Nursing Services. The Organizational Charts clarify relationships and define lines of authority and accountability.

Committees that support the organizational structure at Northwest Texas Hospital are standing committees of the medical staff and committees that support Nursing Services. Committees of the medical staff are physician-directed with support from the Chief Executive Officer and the Board of Managers. These committees include the Executive Committee, Credentials Committee, Quality Improvement committee, Utilization Review Committee, Pharmacy/Therapeutics and Infection Control Committee, Bylaws Committee, Critical/Ambulatory Care committee, Perinatal Committee, Cancer Committee, Joint Medical Education Committee, and the Medical Health Committee.

The Nursing Coordinating Council serves as the centralized decision-making body for Nursing Services at Northwest Texas Hospital (Appendix F). Functions of this Council are to insure safe, efficient and therapeutic nursing care of patients; initiate, implement, and coordinate the activities of the nursing staff; implement a systematic plan for evaluating nursing care; provide a means whereby issues of concern may be resolved; and approve standards of nursing care and job descriptions which ascribe to a high level of professional performance. Committees and councils that support this structure are the Peer Review Committee, Clinical Practice Council, Standards Council, Education Council, and Quality Improvement Council.

The Center for Nursing Development maintains an essential position in the Department of Nursing. The scope of services provided to the Department of Nursing consists of central nursing orientation, unit orientation, inservice education, continuing education, community outreach, research, and quality improvement activities. Clinical educators consist of registered nurses who function as a cohesive group and as individuals to assess, plan, implement, and evaluate all activities of nursing education for the Department of Nursing. Minimum educational requirements include a bachelor of science degree in nursing, with a master of science in nursing preferred. There are six clinical educators at Northwest Texas Hospital who are experts in their clinical areas. These areas include medical-surgical nursing, critical care nursing, psychiatric nursing, pediatric nursing, maternal and infant nursing, and obstetrics and gynecological nursing. These educators are accountable to the Director of the Center for Nursing Development.

Summary

Northwest Texas Hospital and the Amarillo Hospital District are undergoing change to meet the health care needs of the citizens of the Amarillo area as well as the Texas Panhandle. As an open system and change agent in the regional area, the hospital will continue to restructure, reorganize, and develop new strategic planning ideas to accommodate the health care needs of citizens in the twenty-first century.

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Appendix A

Mission Statement for
Northwest Texas Hospital

MISSION STATEMENT FOR
NORTHWEST TEXAS HOSPITAL

Northwest Texas Hospital is committed to serving patients and their families in partnership with physicians attaining a high degree of excellence in all phases of health care. We are dedicated to providing the finest medical care in the Texas Panhandle in cooperation with the medical community, Texas Tech University Health Sciences Center, and other health care providers. We will offer the foremost technology, facilities and staff enhanced by a sense of compassion and an abiding respect for human dignity.

We are further committed to providing leadership. We will maintain our emphasis on education and will conduct our business affairs according to the highest ethical principles.

We will continue to foster effective working relationships among our physicians, volunteers, employees and executive staff, encouraging a caring attitude among all.

By honoring our commitments, principles and values, we will strive to achieve maximum healing of each patient placed in our care.

Appendix B

Mission Statement for the
Amarillo Hospital District

MISSION STATEMENT FOR
THE AMARILLO HOSPITAL DISTRICT

As legislatively mandated, the mission of the Amarillo Hospital District is the provision of medical care to the indigent and needy residents within the co-extensive boundaries of the City of Amarillo and Potter County.

The Amarillo Hospital District Board is committed to the provision of a preventive, curative and caring service for the residents within these boundaries. This service is provided by Northwest Texas Hospital through inpatient, outpatient and emergency services.

Individual services are planned to ensure the maximum possible accessibility, quality, continuity and care while promoting maximum efficiency.

All services are delivered with respect and dignity to human life, striving to restore optimal health to all patients of the Amarillo Hospital District.

Acknowledging the stated mission, it is the goal and philosophy of the Amarillo Hospital District to recognize the worth and dignity of each individual whether the recipient or the provider of health care services.

Appendix C

Summation of Strategic Planning for Northwest Texas Hospital and the Amarillo Hospital District (1989)

Summation of Strategic Planning for Northwest Texas Hospital and the Amarillo Hospital District (1989)

I. Maintain financial viability of northwest Texas Hospital through monitoring specific financial benchmark:

  A. Maintain operating reserves sufficient enough to meet 6-8 weeks operating expenses.
  B. Fully fund depreciation on a monthly basis.
  C. Eliminate the Tax Fund deficit.
  D. Maintain 4-6% profitability on operations of the hospital.
  E. Monitor efficiency of each department through established productivity standards.

II. Address the issue of indigent and uncompensated care to enable Northwest Texas Hospital to continue offering quality care in a cost effective manner through the efficient utilization of resources.

III. Reduce inappropriate utilization of Northwest Texas hospitals facilities and services.

IV. Increase funds available for indigent health care.

V. Maximize efficiency and effectiveness of services.

VI. Enhance existing management information systems for reporting, evaluating programs and services, projecting trends, forecasting needs, and for budgeting indigent health care.

VII. Maintain and enhance Northwest Texas Hospital's centers of excellence, explore the health care needs of the service area, and provide an appropriate level of services which meet patient and community needs.

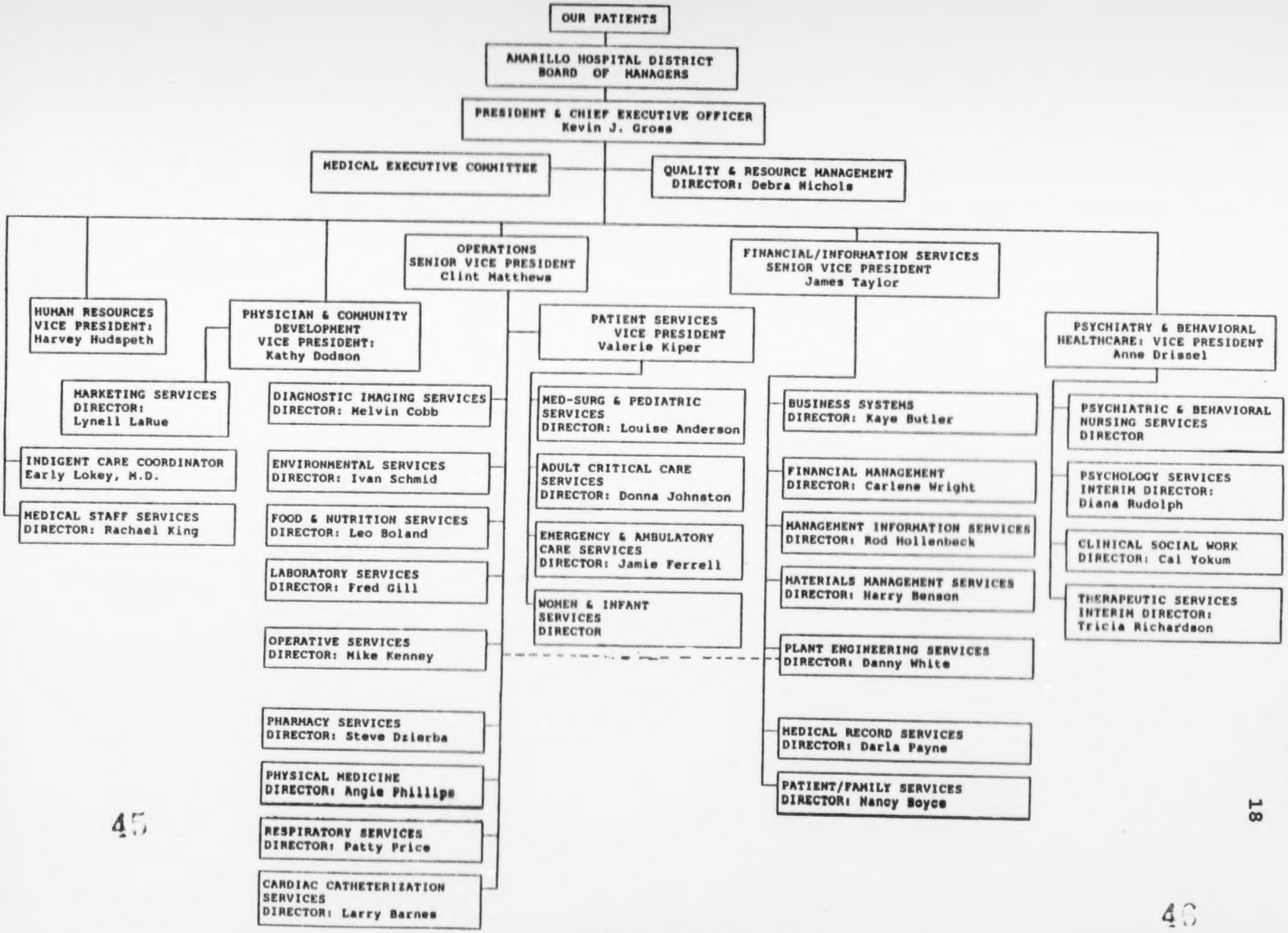
VIII. Continue to enhance the image of Northwest Texas Hospital and respond appropriately to the competitive health care environment.

Appendix D

Northwest Texas Hospital

Organizational Chart

NORTHWEST TEXAS HOSPITAL
ORGANIZATIONAL CHART



- OUR PATIENTS
  - AMARILLO HOSPITAL DISTRICT BOARD OF MANAGERS
    - PRESIDENT & CHIEF EXECUTIVE OFFICER
Kevin J. Gross
      - MEDICAL EXECUTIVE COMMITTEE
      - QUALITY & RESOURCE MANAGEMENT
DIRECTOR: Debra Nichols
      - INDIGENT CARE COORDINATOR
Early Lokey, M.D.
      - MEDICAL STAFF SERVICES
DIRECTOR: Rachael King
      - HUMAN RESOURCES
VICE PRESIDENT:
Harvey Hudspeth
      - PHYSICIAN & COMMUNITY DEVELOPMENT
VICE PRESIDENT:
Kathy Dodson
        - MARKETING SERVICES
DIRECTOR:
Lynell LaRue
      - OPERATIONS
SENIOR VICE PRESIDENT
Clint Matthews
        - DIAGNOSTIC IMAGING SERVICES
DIRECTOR: Melvin Cobb
        - ENVIRONMENTAL SERVICES
DIRECTOR: Ivan Schmid
        - FOOD & NUTRITION SERVICES
DIRECTOR: Leo Boland
        - LABORATORY SERVICES
DIRECTOR: Fred Gill
        - OPERATIVE SERVICES
DIRECTOR: Mike Kenney
        - PHARMACY SERVICES
DIRECTOR: Steve Dzierba
        - PHYSICAL MEDICINE
DIRECTOR: Angie Phillips
        - RESPIRATORY SERVICES
DIRECTOR: Patty Price
        - CARDIAC CATHETERIZATION SERVICES
DIRECTOR: Larry Barnes
        - PATIENT SERVICES
VICE PRESIDENT
Valerie Kiper
          - MED-SURG & PEDIATRIC SERVICES
DIRECTOR: Louise Anderson
          - ADULT CRITICAL CARE SERVICES
DIRECTOR: Donna Johnston
          - EMERGENCY & AMBULATORY CARE SERVICES
DIRECTOR: Jamie Ferrell
          - WOMEN & INFANT SERVICES
DIRECTOR
      - FINANCIAL/INFORMATION SERVICES
SENIOR VICE PRESIDENT
James Taylor
        - BUSINESS SYSTEMS
DIRECTOR: Kaye Butler
        - FINANCIAL MANAGEMENT
DIRECTOR: Carlene Wright
        - MANAGEMENT INFORMATION SERVICES
DIRECTOR: Rod Hollenbeck
        - MATERIALS MANAGEMENT SERVICES
DIRECTOR: Harry Benson
        - PLANT ENGINEERING SERVICES
DIRECTOR: Danny White
        - MEDICAL RECORD SERVICES
DIRECTOR: Darla Payne
        - PATIENT/FAMILY SERVICES
DIRECTOR: Nancy Boyce
      - PSYCHIATRY & BEHAVIORAL HEALTHCARE: VICE PRESIDENT
Anne Drissel
        - PSYCHIATRIC & BEHAVIORAL NURSING SERVICES
DIRECTOR
        - PSYCHOLOGY SERVICES
INTERIM DIRECTOR:
Diana Rudolph
        - CLINICAL SOCIAL WORK
DIRECTOR: Cal Yokum
        - THERAPEUTIC SERVICES
INTERIM DIRECTOR:
Tricia Richardson

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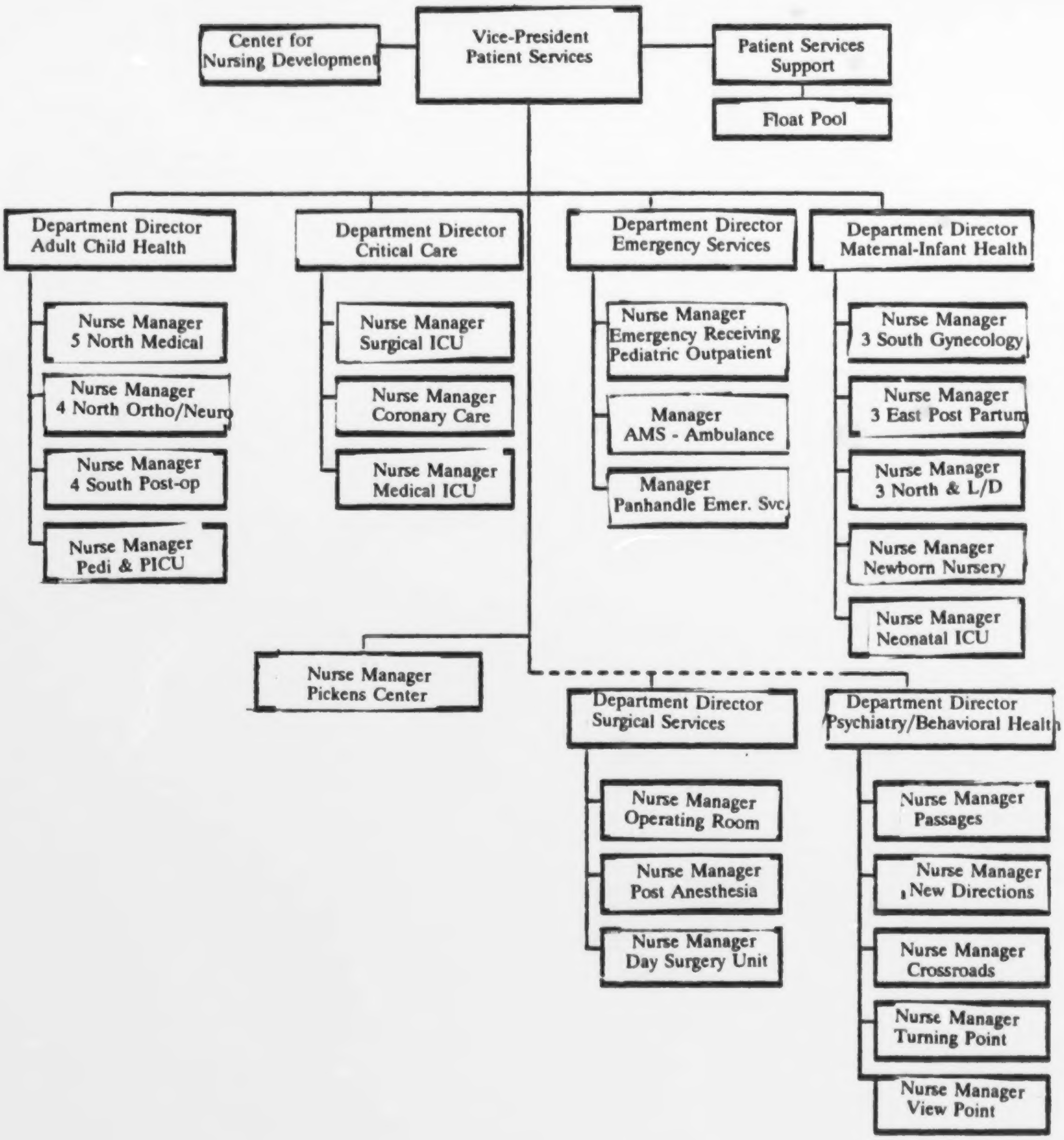
Appendix E

Northwest Texas Hospital

Organizational Chart for Nursing Services

NORTHWEST TEXAS HOSPITAL

ORGANIZATIONAL CHART FOR NURSING SERVICES


Center for Nursing Development
Vice-President Patient Services
Patient Services Support
Float Pool
Department Director Adult Child Health
Department Director Critical Care
Department Director Emergency Services
Department Director Maternal-Infant Health
Nurse Manager 5 North Medical
Nurse Manager 4 North Ortho/Neuro
Nurse Manager 4 South Post-op
Nurse Manager Pedi & PICU
Nurse Manager Surgical ICU
Nurse Manager Coronary Care
Nurse Manager Medical ICU
Nurse Manager Emergency Receiving Pediatric Outpatient
Manager AMS - Ambulance
Manager Panhandle Emer. Svc.
Nurse Manager 3 South Gynecology
Nurse Manager 3 East Post Partum
Nurse Manager 3 North & L/D
Nurse Manager Newborn Nursery
Nurse Manager Neonatal ICU
Nurse Manager Pickens Center
Department Director Surgical Services
Department Director Psychiatry/Behavioral Health
Nurse Manager Operating Room
Nurse Manager Post Anesthesia
Nurse Manager Day Surgery Unit
Nurse Manager Passages
Nurse Manager New Directions
Nurse Manager Crossroads
Nurse Manager Turning Point
Nurse Manager View Point

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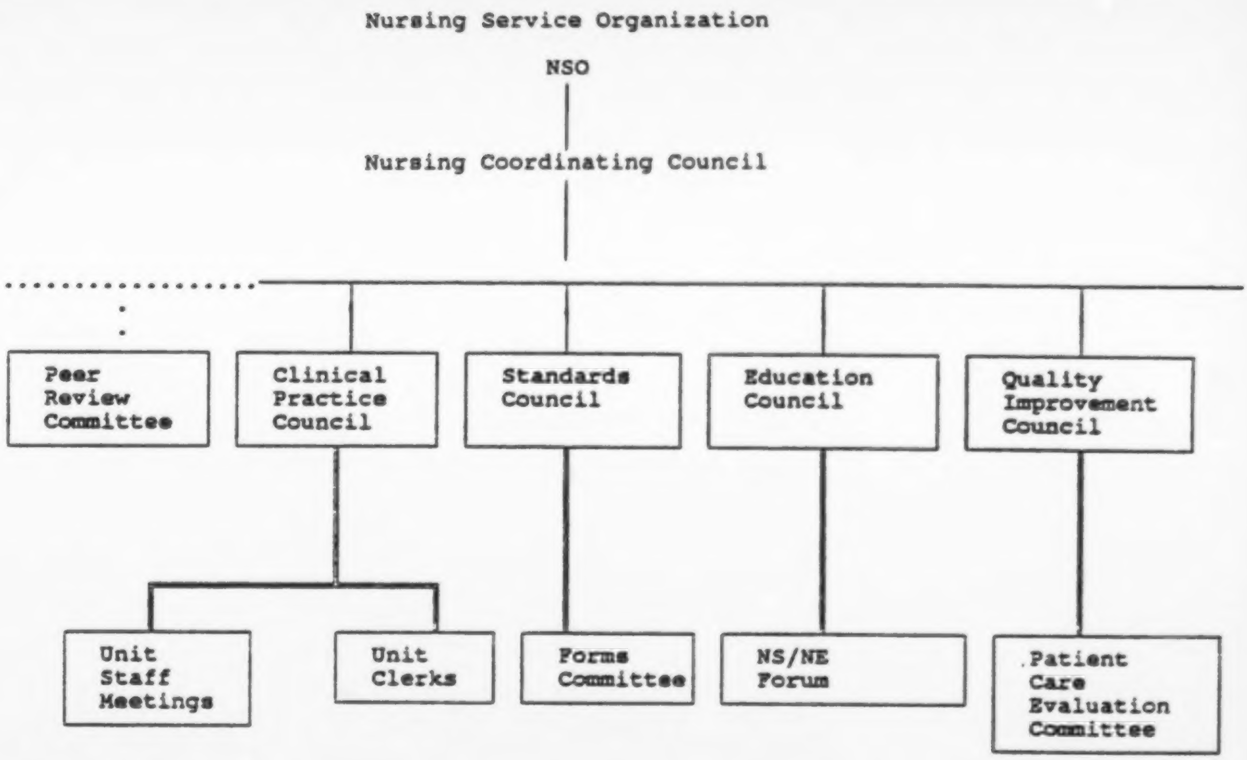
Appendix F

Northwest Texas Hospital

Nursing Coordinating Council

NORTHWEST TEXAS HOSPITAL

NURSING COORDINATING COUNCIL


Nursing Service Organization
NSO
Nursing Coordinating Council
Peer Review Committee
Clinical Practice Council
Standards Council
Education Council
Quality Improvement Council
Unit Staff Meetings
Unit Clerks
Forms Committee
NS/NE Forum
Patient Care Evaluation Committee

STRATEGIC PLANNING: DELIVERY OF QUALITY CARE THROUGH NURSING'S COMMITMENT TO QUALITY IMPROVEMENT

Governance and Management

by:

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Dallas Cluster

A Professional Paper presented to Nova University
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Nova University

October 1992

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Vision: Nursing's Commitment to Quality Improvement at Northwest Texas Hospital 8

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- B. Patient Access Channels
- C. Northwest Texas Hospital Services Offered
- D. Northwest Texas Hospital Financial Position
- E. Tactical and Strategic Planning Firms for Northwest Texas Hospital
- F. Systems Approach to Quality Improvement at Northwest Texas Hospital

Introduction

Hospitals and their environment are undergoing dynamic change. Changes in medical and nursing practice and competition are affecting the utilization and service components of health care facilities. The hospital's traditional inpatient acute care role is rapidly expanding to include a comprehensive array of outpatient and other services. The various changes occurring throughout the health care industry have fostered a price-competitive and market-driven service delivery system. Northwest Texas Hospital must meet these challenges to enhance the quality of care delivered to all patients. Staff development will need to maximize its available resources through creative strategies to promote nursing staff comprehension and commitment to quality improvement.

Nursing will maintain a synergistic alliance interdepartmentally in the identification of patient centered problems to maintain access and quality of care to those served. The purpose of this professional paper is to examine the process of strategic planning at Northwest Texas Hospital and the development of a program to support nursing's participation in quality improvement.

Strategic Planning Process at Northwest Texas Hospital

The strategic planning process at Northwest Texas Hospital involves innovative methods for generating positive net cash flows, either directly or indirectly. According to McLean (1990), strategic planning is then an application of the logic of capital budgeting to the selection of lines of business. The hospital is a not-for-profit charitable entity that occasionally generates positive cash flow. Endowments have been established to support certain types of care, such as neonatal intensive care and services to certain types of individuals, such as the indigent population, that would otherwise not be offered in the private sector.

Strategic planners at Northwest Texas Hospital do not emphasize the goal of positive cash flow, but rather the feasibility of financing activities that are within the mission of the organization to meet the needs of the community. The primary focus of Northwest Texas Hospital, as a publicly funded institution, is to provide the citizens of Amarillo and the Texas Panhandle cost effective and quality health care service.

A contingency view of strategic planning at Northwest Texas Hospital has been implemented and includes markets served (Appendix A), patient access channels (Appendix B), services offered (Appendix C), and financial position (Appendix D). This approach reflects systems concepts and a contingency view, because it recognizes the interrelationships among the various components. The institution also emphasizes competency, opportunity, and societal responsibilities in the process of strategic planning.

The strategic plan is in concert with the mission and vision of Northwest Texas Hospital and is initiated by the strategic apex including the board of managers, Medical Community, Chief Executive Officer, Chief Financial Officer, Vice President of Operations and Vice President of Financial Services. Positions at the strategic apex relate primarily to the organization's external environment; they create the mission and provide strategic direction (Files, 1988). The strategic apex at Northwest Texas Hospital examines the input sources into the organizational system, while the technostructure standardizes the work of others by inspecting processes and outputs. The quality improvement teams in the hospital perform such functions.

To assist in the development of a successful strategic plan the strategic apex occasionally employs external firms (Appendix E) to assist in an objective and comprehensive analysis of available resources that usually incorporate (1) environmental opportunity, what the hospital might do; (2) competence and resources, what the hospital can do; (3) managerial interests and desires, what the hospital wants to do; and (4) responsibility to society, what the hospital should do. These contingency factors are currently incorporated into Northwest Texas Hospital's strategic planning process.

Northwest Texas Hospital provides care to the county's indigent population; the indigent patient volume accounts for only 20% of the patients admitted into the hospital. Northwest Texas Hospital is a community supported institution in conjunction with the medical community that establishes standards for Amarillo and the remainder of the Panhandle. Therefore, the strategies selected by Northwest Texas Hospital presently support the needs of the entire community.

Patient Satisfaction: The Quality Improvement Process at Northwest Texas Hospital

Quality may be defined as meeting or exceeding client expectations and needs. The term "client" is utilized to impute dignity to the patient. Total quality improvement at Northwest Texas Hospital is an approach that focuses on giving top value to patients by building excellence into every aspect of the hospital and by creating an environment that encourages everyone to contribute to the organization. The quality improvement process at Northwest Texas Hospital utilizes a systems approach to quality improvement (Appendix F).

According to Smeltzer, Hinshaw, and Feltman (1987), it is necessary for top level managers to (1) promote a culture that emphasizes quality and training, (2) initiate a large scale training program to help managers and other employees understand quality improvement, (3) estabish definite goals for improving quality, and (4) restructure the organization to break departmental barriers and encourage managers to work together for quality enhancement. These concepts have been incorporated into the hospital's quality improvement program.

According to Deming (Hirotaka & Quelch, 1983), the most global and versatile index of overall hospital quality is patient satisfaction. It is impossible to perform total quality without asking the patient's opinions and monitoring the impact of quality improvement activities upon the patient's perception of care. Perception may be defined as each patient's representation of reality. When consistent patient-centered problems arise, multidisciplinary quality improvement teams are developed.

The nursing staff at Northwest Texas Hospital is actively involved in quality improvement issues; however, there is a lack of focus and commitment to the program. The overall objective is for the nursing staff to envision personal and organizational gains from commitment to quality improvement. Seventy percent of the total employees at Northwest Texas Hospital are nurses; therefore, a vital link exists between nursing's role in quality improvement and the patient's perception of satisfaction.

Vision: Nursing's Commitment to Quality Improvement

Nursing is involved in caring for the patient more than any other service within the hospital. It is necessary for nurses, especially registered nurses who are the leaders, to understand and support quality improvement. Nurses have been involved with quality improvement teams but usually function in the capacity of team member. Currently at Northwest Texas Hospital there are twelve quality improvement teams, with nursing functioning at the level of team member. The purpose of quality improvement teams is to mobilize managers, supervisors, and employees to solve and prevent quality problems and improve processes, thus enhancing the delivery of optimal levels of patient care.

Many registered nurses are leaders and may function as a team facilitator under the direction of vice president of quality and resource management. The facilitator is not a member of the team, but a person outside the group who serves as a coach or consultant for the team. Additionally, nurses can occupy the role of team leader with the specific responsibility for guiding the team through the meeting process to achieve the objectives. The leader is responsible for providing direction and support for the team. Most nurses, as caregivers, do not empower themselves to effect change.

During the fiscal year 1990-1991 there were 22 teams at Northwest Texas Hospital with nursing occupying the role of facilitator or team leader in three of those teams. There is a woeful lack of support for quality improvement from the staff, because most nurses do not see themselves as business minded practitioners who can, as individuals, enhance patient satisfaction.

Management support is necessary for the operating core to feel a commitment to quality improvement. When the technostructure does not support an issue the operating core usually follows suit. Nursing managers may empower their staff by being a role model; supporting total quality; and giving staff members the tools necessary to get the job done, the freedom to be creative and innovative, the authority to exercise best judgment, the responsibility to improve continuously, a sense of ownership, and the recognition deserved. The hospital follows the human resource frame in that there is an emphasis on the interdependence between people and the organization (Bolman & Deal, 1991). The focus is on ways to develop a better fit between people's needs, skills, and values, on the one hand, and formal roles and relationships, on the other. It is necessary for management to empower the nursing staff by visualizing the benefit of internal motives. As unique individuals with dignity and self worth, each employee may be concerned with how quality improvement can impact individual job performance. Essentially the nursing staff may be asking the question "what's in it for me?" Addressing this question will accomplish insight and can significantly impact the entire hospital. The key is to validate that each employee is important and that his or her values are respected and appreciated.

A vision for Northwest Texas Hospital is to empower nurses to be motivated in the commitment to total quality improvement. Providing that the strategic apex and technostructure continue to support total quality concepts, nursing educators will need to develop strategies that will inspire staff members to be committed to quality improvement. There is a direct relationship between staff development intervention, nursing's understanding of total quality, and the delivery of competent care to the patient population.

Initially, a comprehensive educational needs assessment will need to be implemented to ascertain the level of knowledge of quality improvement related issues. This needs assessment may be analyzed and the statistics presented to directors in their respective nursing departments. If there is a lack of understanding and motivation for quality improvement, the findings may be discussed by nursing educators with the vice president of patient services and vice president of quality and resource management. When the problem has been acknowledged and validated by management, nursing education will develop creative strategies to inspire the staff to feel a sense of personal and professional commitment to quality improvement. Additionally, nursing education will gain valuable support by training managers how to empower themselves as well as their staff. The support and commitment from each manager is crucial before nursing educators implement change and restructure educational approaches. The program delivered by nursing staff development will assist each nursing employee, whether a registered nurse, licensed vocational nurse, nursing assistant, or unit secretary, in the knowledge and skills necessary to actively participate in quality improvement. The emphasis will be placed on the cognitive domain (what the employee needs to know), the affective domain (what the employee needs to feel), and the psychomotor domain (what the employee needs to do). The objective will be to inspire the nursing staff to be committed to total quality, providing competent care and promoting patient satisfaction.

Conclusions

The strategic apex determines Northwest Texas Hospital's direction in meeting the needs of the Amarillo area and the Texas Panhandle. The goals and objectives of each department within the hospital support the mission and vision of the institution. The major objective is maintaining and improving patient satisfaction. Questionnaires are available for patients to complete and are statistically measured to determine areas of concern. These concerns may be addressed when significant or consistent by multidisciplinary quality improvement teams. Nursing plays a significant role in this systems approach and will need to feel a sense of commitment to the quality improvement issues. Nursing education at Northwest Texas Hospital, in concert with the management staff, will assist in the implementation of a creative program to accomplish this goal.

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Appendix A

Markets Served

MARKETS SERVED

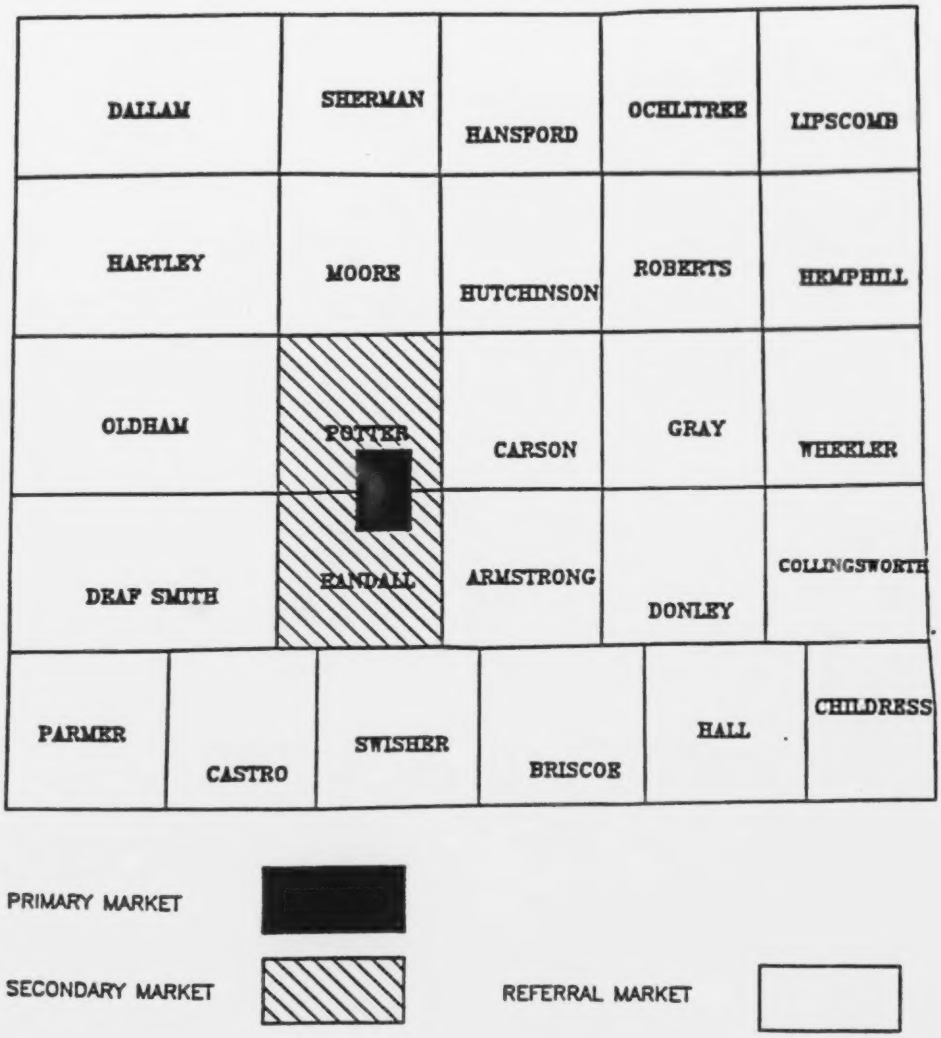
The projected increases in population will not keep pace with the expected declines in inpatient utilization patterns resulting in a shrinking number of area admits. Thus, maintenance of NWTH census can be achieved only through increases in market share.

Presently, there are three dominant Panhandle healthcare providers with no clear market leader among them, although service development and positioning activities of competitors are intensifying. Success in the local market depends upon a variety of factors:

- Physician admitting and referral practices
- Competitive structure and performance
- Product and service mix
- Patient/consumer preferences, perceptions and behavior

Markets Served

Amarillo Hospital District serves a broad geographical area including the City of Amarillo and the remainder of the Texas Panhandle consisting of 24 Texas counties.


DALLAM
SHERMAN
HANSFORD
OCHILTREE
LIPSCOMB
HARTLEY
MOORE
HUTCHINSON
ROBERTS
HEMPHILL
OLDHAM
POTTER
CARSON
GRAY
WHEELER
DEAF SMITH
RANDALL
ARMSTRONG
DONLEY
COLLINGSWORTH
PARMER
CASTRO
SWISHER
BRISCOE
HALL
CHILDRESS
PRIMARY MARKET
SECONDARY MARKET
REFERRAL MARKET

Markets Served

There were twenty—one acute care providers in the Panhandle with over 1900 licensed beds in 1986. Occupancy levels in the referral market are extemely low. The Panhandle has excess bed capacity ranging from 550 to 650 beds.

	Beds	1990 Admissions	ADC	Occupancy
Primary Service Area				
Amarillo Hospital District	392	15,291▲	277	70.7%
High Plains Baptist	308	9,709	185	60.1
St. Anthony's	284	10,788	200	70.4
Family Hospital Center	50	1,037	16	32.0
	1,034	36,825	678	65.6
Secondary Service Area				
Palo Duro Hospital	49	1,718	21	42.9
Referral Service Area				
Plains Memorial Hospital	46	767	7	15.8
Childress General Hospital *	75	1,229	15	20.0
Collingsworth General Hospital *	25	585	7	29.0
Coon Memorial Hospital	20	600	8	40.0
Deaf Smith General Hospital *	66	2,156	25	37.8
HCA Coronado Hospital	126	3,861	65	51.6
Hall County Hospital	28	584	7	24.2
Hansford Hospital	28	653	6	21.4
Golden Plains Community Hospital	99	1,784	18	18.6
Hemphill County Hospital	25	590	6	24.0
Memorial Hospital	80	1,839	18	22.5
Ochilitree General Hospital *	65	2,573	32	49.0
Parmer County Community Hospital	34	354	4	11.8
Swisher Memorial Hosp. Dist *	30	528	7	22.0
Parkview Hospital *	40	731	9	23.0
Shamrock General Hospital	43	898	10	23.3
	830	19,732	244	29.4
Totals	1,913	58,275	943	49.3%

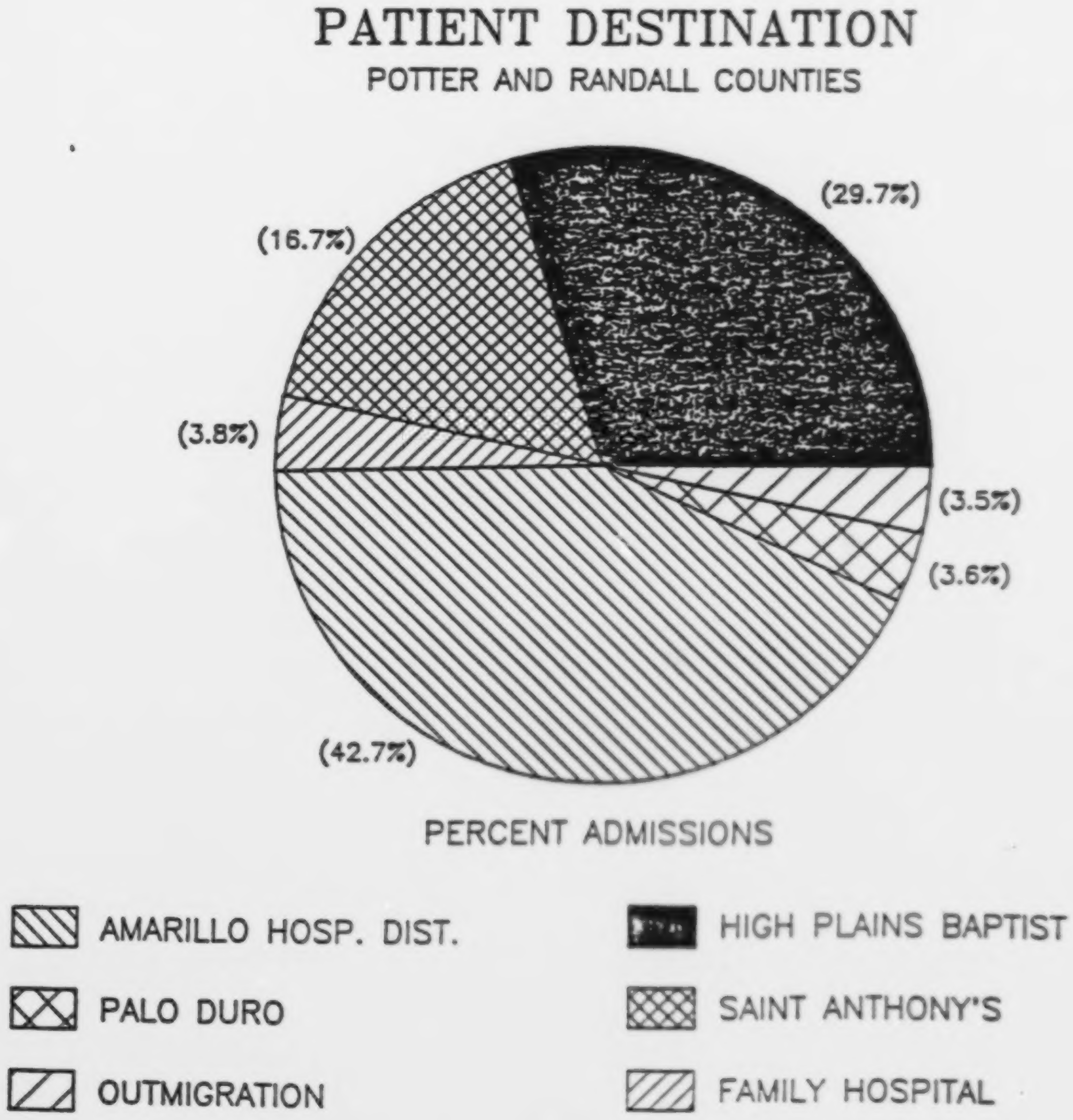
Source: AHA Guide and TDH

* Estimated

▲ Includes psychiatric admissions.

Markets Served

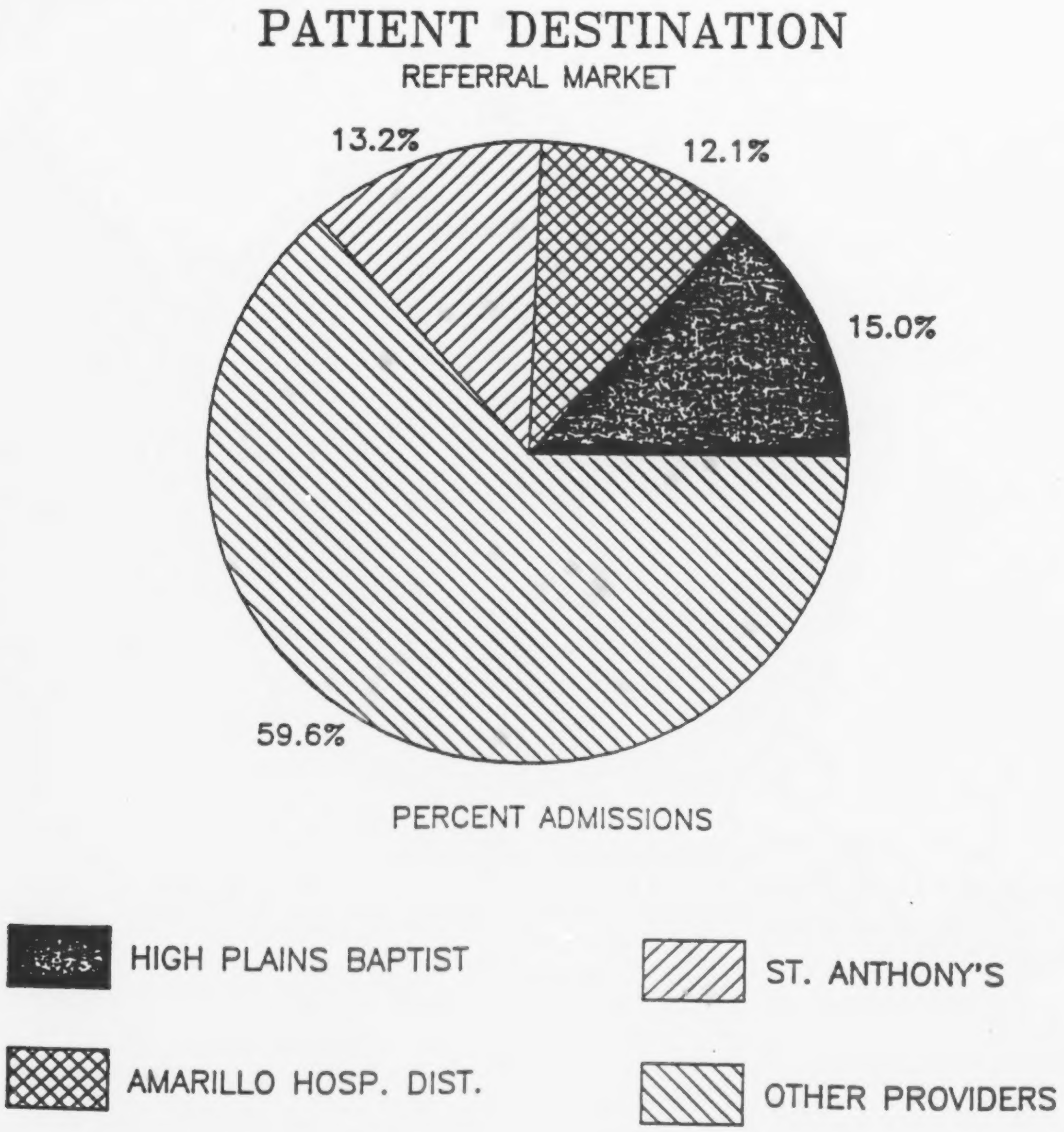
NWTH dominates admissions from Amarillo and the immediately surrounding communities. There is very little outmigration to hospitals outside of Potter or Randall Counties.



Source: THA – 1990

Markets Served

The major Amarillo providers are capturing 40% of the referral market admissions. The remaining 60% of Panhandle residents are choosing other area health care providers — resulting in a large target market for Amarillo providers.



SOURCE: THA — 1990

Appendix B

Patient Access Channels

ACCESS CHANNELS

Physicians are the primary way in which patients access health care services in the Amarillo marketplace. The ability to affect change at NWTH is directly linked to physician support. Finding innovative ways of securing their support is imperative.

With respect to most clinical services at NWTH, the private physicians and TTUSM are poorly integrated and lack cohesiveness. Many clinical specialties lack a core of dedicated NWTH physicians.

TTUSM appears to operate as a multi-specialty physician practice clinic rather than a medical leader at NWTH. A key question is whether TTUSM can make the financial and manpower commitment to increase the stature of the school within the community.

Linkages with other acute care, after care and ambulatory care providers may produce synergistic results and augment NWTH growth. The Panhandle remains a frontier of opportunity. Finding the mechanism for accessing and managing it is critical.

Health maintenance organizations and preferred provider organizations appear to have minimal impact on this market. NWTH should consider whether this investment is truly cost effective or whether direct contracting would produce more beneficial results.

Appendix C

Northwest Texas Hospital Services Offered

SERVICES OFFERED

Dependence on one center of excellence, maternal infant health, could result in NWTH evolving into a specialty hospital, particularly in a market which is diversifying rapidly.

NWTH presently has several service niches which, if properly marketed, could result in the development of additional centers of excellence such as:

- Trauma
- Mental Health
- Pediatrics
- Critical Care Services
- Pediatric Subspecialties
- Infectious Diseases
- Pulmonary Diseases
- Endocrinology/Metabolic Disorders
- Hematology—Oncologist
- Trauma Surgeons

Services Offered

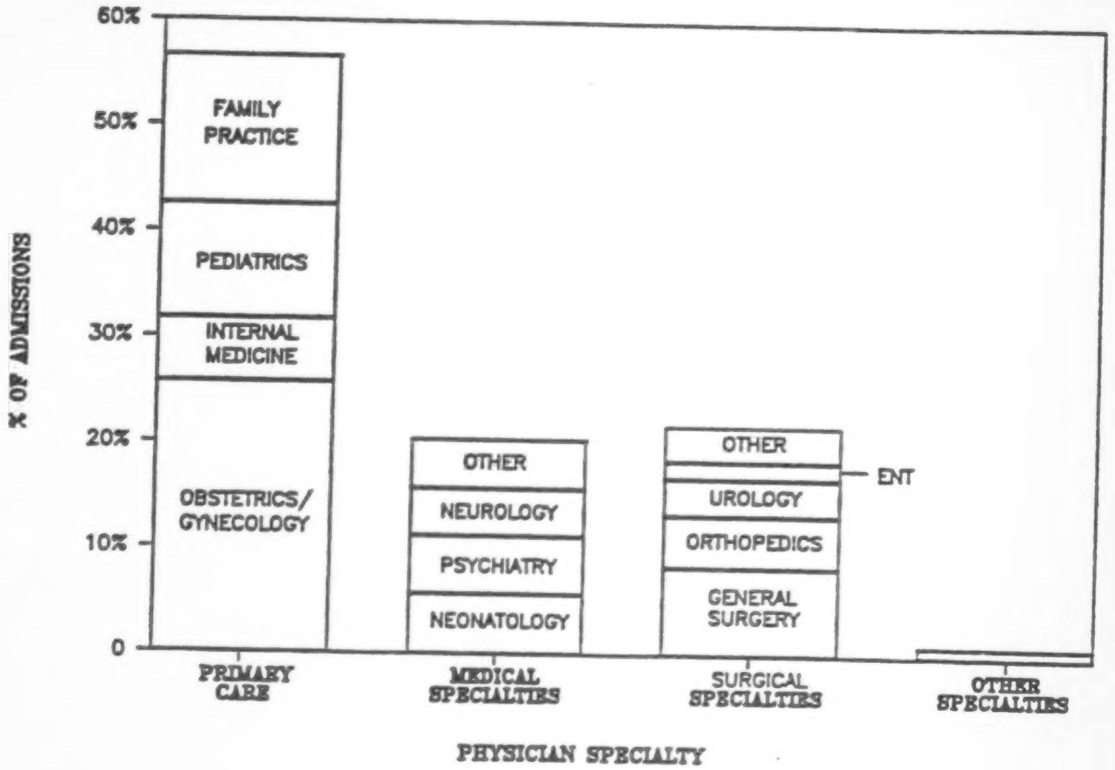
Maternal, infant and child health services represent the most significant business segment at NWTH. However, the revenue contribution is not proportional to the volumes treated due to the shorter ALOS and lower intensity of services required by these patients.

Major Diagnostic Category	MDC	Percent of	
		Admissions	Revenue
Pregnancy, childbirth & the puerperium	14	18.55%	10.37%
Newborns with condtn orig in perinatal	15	15.16	12.69
Digestive System	6	9.18	8.01
Muscloskeletal system conn. tissue	8	8.13	8.24
Female reproductive system	13	7.36	5.70
Respiratory system	4	6.19	9.18
Mental diseases & disorders	19	5.09	7.13
Circulatory system	5	4.77	7.86
Nervous system	1	4.56	9.43
Skin, subcutaneous tissue & breast	9	3.13	2.14
Kidney & urinary tract	11	2.78	2.22
Ear, nose & throat	3	2.47	1.13
Heptobiliary system & pancreas	7	1.78	3.35
Poisioning & toxic effects of drugs	21	1.72	2.83
Substance use & induced organic mental	20	1.68	1.99
Endocrine, nutritional & metabolic	10	1.47	1.82
Male reproductive system	12	1.22	0.93
Infectious & parasitic diseases	18	1.04	1.17
Diseases & disorders of the eye	2	1.03	0.68
Myeloproliferative Disorders	17	0.93	0.94
Factors influencing hlth stat	23	0.83	0.21
Blood & blood forming organs	16	0.66	1.32
Burns	22	0.26	0.65
		100.00%	100.00%

Source: NWTH records – 1990

Services Offered

The Primary Care specialties dominate admissions at NWTH.

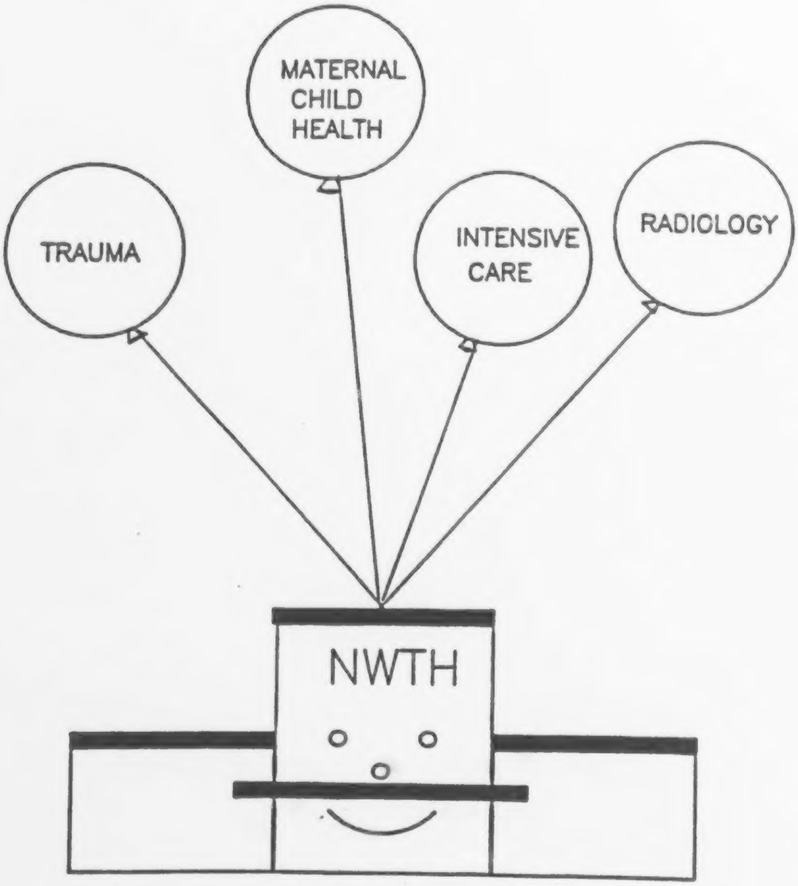


Source: NWTH Records – 1990

Services Offered

NWTH has a number of strong/emerging programs. Stakeholders mentioned the following strengths –

Strengths	Comments
Maternal Child Health	Comprehensive, high qualtity, Private – TT cooperation
Intensive Care Services	Standard by which competitors are measured
Radiology	High quality


MATERNAL CHILD HEALTH
TRAUMA
INTENSIVE CARE
RADIOLOGY
NWTH

Appendix D

Northwest Texas Hospital
Financial Position

FINANCIAL ANALYSIS

Long-term financial viability is contingent on:

- Increasing NWTH's penetration in the local and referral markets.
- Expanding the product/service mix.
- Establish centers of excellence.
- Integrating TTUSM and private physicians into the NWTH organizational and planning process.
- Realigning the cost profile to become the most efficient, quality provider in the market.

Appendix E

Tactical and Strategic Planning Firms for Northwest Texas Hospital

TACTICAL AND STRATEGIC PLANNING FIRMS

FOR NORTHWEST TEXAS HOSPITAL

1990: Ernst and Whinney

1986: Peat, Marwick, Mitchell, and Company
Dallas, Texas

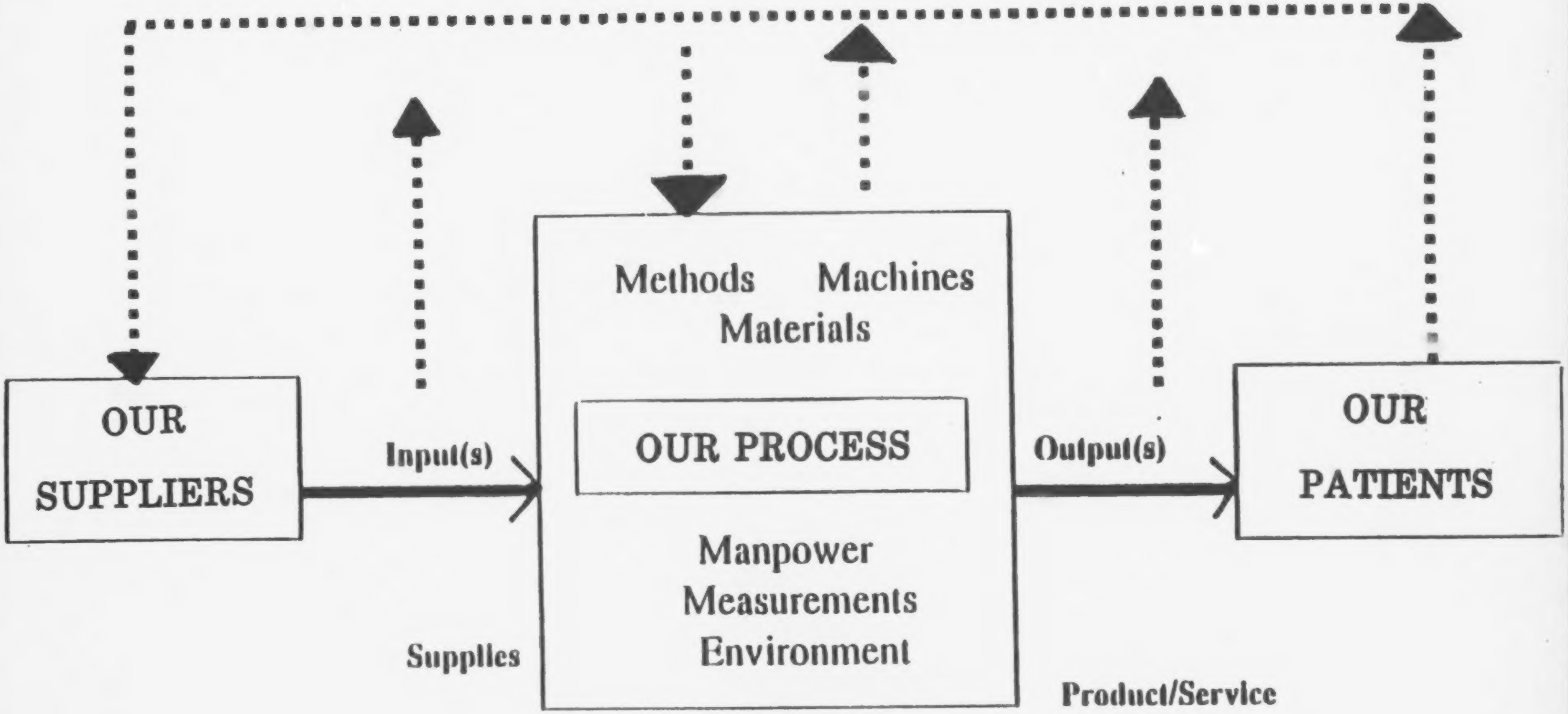
1985: Tibrook Management Consultants
Oak Brook, Illinois

1983: Robert A. Douglass Associates, Inc.
Minneapolis, Minnesota

Appendix F

Systems Approach to Quality Improvement at Northwest Texas Hospital

QUALITY IMPROVEMENT PROCESS



OUR SUPPLIERS

Input(s)

Supplies

Methods Machines
Materials

OUR PROCESS

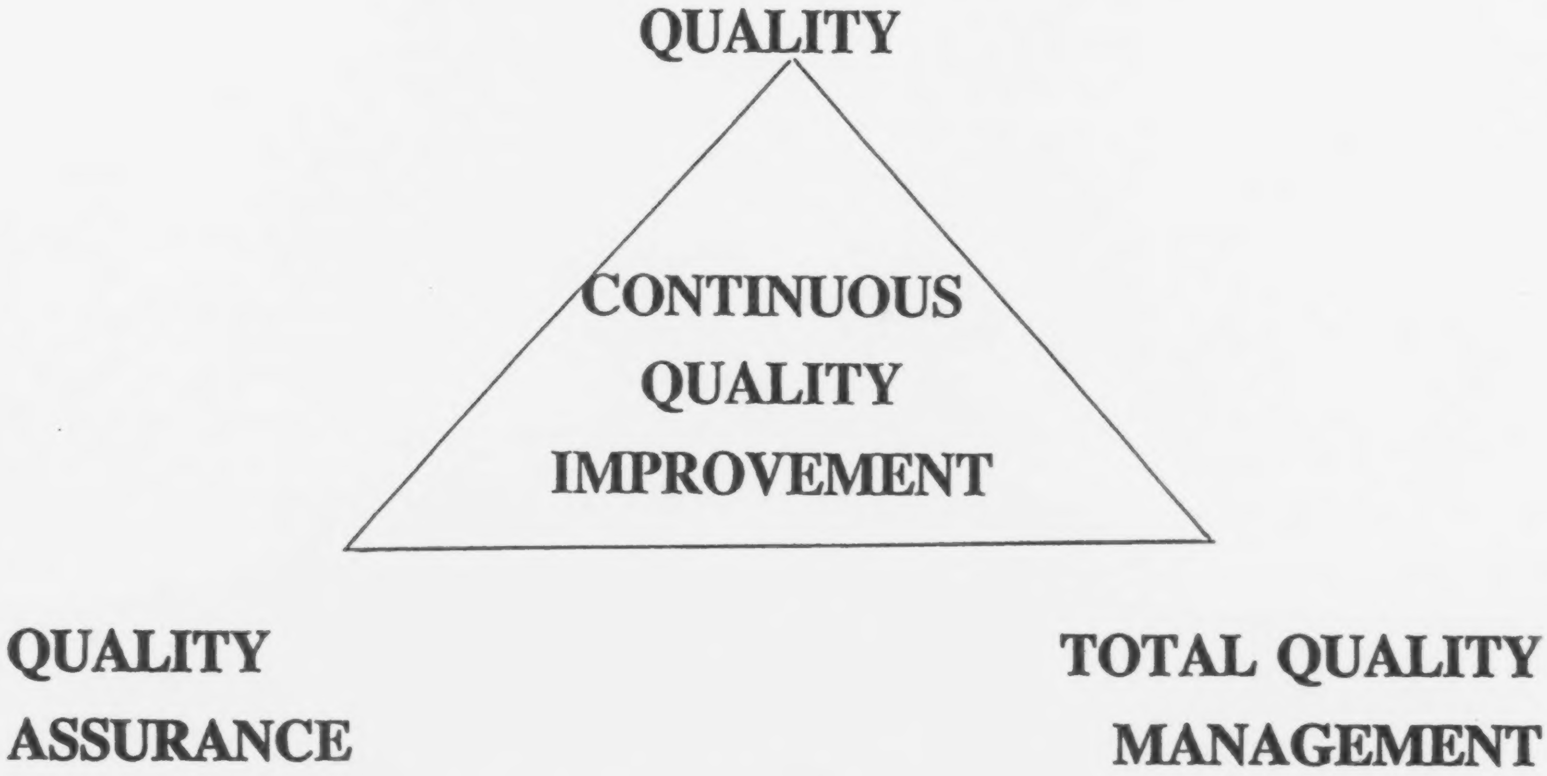
Manpower
Measurements
Environment

Output(s)

Product/Service

OUR PATIENTS

THE NEW PARADIGM



QUALITY

CONTINUOUS
QUALITY
IMPROVEMENT

QUALITY
ASSURANCE

TOTAL QUALITY
MANAGEMENT

GOALS: IMPLEMENTATION OF A PROGRAM TO ENHANCE NURSING COMMITMENT TO TOTAL QUALITY IMPROVEMENT AT NORTHWEST TEXAS HOSPITAL

Governance and Management

by:

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Northwest Texas Hospital

Anita Barrett, Ph.D.

Dallas Cluster

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in partial fulfillment of the requirements
for the degree of Doctor of Education

Nova University

November 1992

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Introduction

Northwest Texas Hospital has traditionally been management driven, strongly decentralized, strictly hierarchical, autocratic, and generally unsuccessful with attempts to effect change with patient dissatisfaction. Patient satisfaction is a valid and sensitive indicator of quality care. Patients, moreover, make surprisingly good judgments about actual care. The new paradigm that is being initiated with nursing service at Northwest Texas Hospital is total quality improvement.

Total quality improvement is customer driven, participatory, fosters creativity, and is proactive and enhances the quality of nursing care delivered to patients. Nursing staff at all levels will facilitate this new paradigm empowering themselves to effect change and foster personal growth while promoting quality care. The purpose of this professional paper is to implement a strategic plan utilizing Deming's improvement cycle (Appendix A), in concert with systems theory, to enhance the nursing staff's participation and commitment to total quality improvement.

Planning: Goals and Objectives for 1993, 1994 and 1995

Quality has emerged as one of the dominant health care themes of the 1990s. The best proof of quality is the index of patient satisfaction. Because nurses are directly involved in the patient's care, it is necessary to foster education that is conducive to facilitating nursing's comprehension and commitment to quality improvement. According to Frost (1992), frequently standards for judging quality are implemented in the clinical setting without input from caregivers and clients who are being served.

The primary goal for 1993 (Appendix B) is to promote an awareness of total quality improvement emphasizing patient satisfaction. Basic concepts of quality will be addressed; however, the complex process of total quality will be addressed in 1994. An assessment of the nursing staff's perception of the importance of total quality will lay the foundation and direction of the educational process. This will assist educators and managers to determine nursing's perception of organizational values, establishing a vital link between nurses' individual internal motives and patient satisfaction.

The staff's values are often not assessed prior to implementing programs affecting patient satisfaction. Additionally, the client's perception of values is frequently not assessed. This lack of assessment can lead to a low level of client satisfaction when the standards set for quality nursing care are not met

(Sleifert, 1990). The goal for the first year of the total quality plan at Northwest Texas Hospital will emphasize an organization that is customer driven, achieving patient satisfaction from a nursing staff that is committed to providing quality care.

The goal for 1994 (Appendix C) is to facilitate educational training programs to all levels of nursing service in the process of total quality improvement. This can be accomplished by incorporating concepts from workshops into a realistic plan of action for the operating core. An emphasis will be placed on creating a team atmosphere involving all nursing personnel in decision making, problem solving, goal setting, and planning. This will facilitate the process of empowerment. Empowering the staff may be accomplished by providing a clear role function, the education and training required, the resources to get the job done, and the freedom to be creative and innovative. Empowerment in total quality may be assisting in strategic direction decisions at the nursing executive level as well as a nursing assistant providing a genuine smile to a terminally ill patient and the family on a busy medical-surgical floor.

From a research perspective, there is a need to develop methods to measure quality care and the outcomes of quality care. Steffen (1988) has noted that when examining the quality of life, the use of objective measures alone may be a means of protecting the users' own values and priorities. It is necessary that clients themselves be asked when their perspective is important. The goal for 1994 will emphasize training of total quality concepts, empowerment, and research.

The goal for 1995 (Appendix D) is to integrate nursing into leadership roles in total quality improvement teams, fostering insight and commitment to the process, encouraging empowerment, and promoting patient and clinician satisfaction. Another goal for 1995 is to incorporate concepts of total quality into orientation of new nursing employees. The plan is to create a total quality atmosphere that will enhance personal growth as well as providing the best care possible to patients and families. Total quality improvement will become "a way of life" and not just another ineffective project that provides positive feedback, encouraging entropy.

Methodology to Achieve Goals

To facilitate the Goal One of promoting nursing staff's awareness of total quality improvement, a comprehensive needs assessment will be implemented. The focus of this assessment will be to determine how nurses perceive the importance of quality improvement. The question "How important do you perceive quality improvement to be in your job"? was asked of the medical-surgical nursing staff using a Likert scale of 1 to 10, with 1 being the least important and 10 being the most important (Appendix E). The results showed that unit secretaries perceive total quality as being more important than do their nursing managers. Nursing assistants generally perceive quality improvement as not being very important.

A nursing assistant frequently has more impact on patients' perception of satisfaction than do nursing managers because of their continuous contact with the patient population. This question, along with additional questions concerning quality improvement, is being piloted to include all of nursing service to obtain a more global understanding of how nurses perceive the importance of quality improvement.

Nursing education will train management on techniques to inspire their staff to motivate themselves to develop a sense of commitment to quality improvement. Providing adults with ownership, choices, and acknowledging the value of internal motives can significantly enhance the staff's "buy in" to quality improvement (Pike, 1992). Principles of adult motivation will be utilized (Appendix F). Employees are more likely to feel a sense of commitment when they can personally benefit from implementation of a new program. Employees ask the question "What's in it for me"?

The educator of medical-surgical nursing has implemented a strategy to promote wholesome competition concerning quality improvement between the three medical-surgical nursing units. Each unit, as a project has constructed a very large banner. The banner is four feet by four feet, with a creative and colorful border. A creative name reflective of the unit is placed at the top of the banner. The banner is then divided into two equal sections with a vertical line down the middle. The left side of the banner is labelled "Personal benefits of quality improvement" and the right side is labelled "Organizational benefits of quality improvement." This creative banner is then visible to all personnel who walk into the nursing conference rooms on each unit.

Workshops will be held within the hospital utilizing total quality improvement consultants to begin providing education on the in-depth process of quality. Nursing managers and their staff will focus on patient satisfaction questionnaires collecting data relevant to patient satisfaction and dissatisfaction. Traditionally, nursing educators have presented educational programs that are "nice to know" versus what the staff "needs to know." Inservice training programs will support quality improvement issues as statistically identified by management and staff.

Achieving Goal Two of implementing educational training to staff on total quality will be accomplished through continued workshops and consultants on total quality improvement. Clinical educators will present case scenarios to nursing staff members and will role play a potential patient centered or nursing problem. This will assist the nursing staff in learning the processes of brainstorming, creativity, team leading and facilitating quality improvement teams, as well as in the development of charts and diagrams that document this process. Additionally, continuing education courses will be accessible at Amarillo College on total quality improvement.

Achieving goal three of integrating nursing into key leadership roles in continuous quality improvement teams promoting empowerment will be done through biennial review of total quality concepts with the nursing staff. Continuing education via lectures, video programs, and guest speakers will assist in maintaining competency in total quality. Restructuring of existing educational courses at the hospital will incorporate total quality concepts.

Evaluation of Outcomes

Evaluation of Goal One examining nursing's awareness of the importance of total quality, may be accomplished in several ways. The importance of patient satisfaction will be acknowledged by the staff verbalizing an understanding of fifteen factors that are necessary to promote patient satisfaction (Appendix G). Further, they will be able to define ways to empower themselves to effect change that enhances the patient's perception of quality care. In an attempt to move towards total quality, the nursing staff will be able to differentiate between the traditional linear method of management and the new paradigm of total quality.

Evaluation of Goal Two, facilitating the educational process of total quality to the nursing staff, will be accomplished through improved methods of documenting the patient's perception of care in a statistical manner. This may be done through numerical values and charts such as histograms.

Evaluation of Goal Three, integrating nursing into key leadership roles (Appendix H) in continuous quality improvement teams, will be accomplished through monitoring nursing's participation in quality improvement. This will be monitored by the vice president of quality improvement for Northwest Texas Hospital. The ultimate goal is to enhance patient care creating a total quality environment.

Monetary Considerations for the Implementation Process

The implementation of Goal One, creating a general awareness of total quality, will cost an estimated $7,000 for consultant services. This includes $1,200 per eight-hour workshop at Northwest Texas Hospital. Timothy Williams, M.S.N., R.N., total quality consultant, will conduct at least four workshops at Northwest Texas Hospital. The remaining cost will be the consultant's travel expenses. Literature will be disseminated to the nursing staff at a cost of approximately $2,000.

The implementation of Goal Two, providing an education on total quality, will cost approximately $4,000.00 for consultant expenses. Registered nurses who occupy leadership roles such as directors, unit managers, clinical educators, and charge nurses will attend total quality workshops at Amarillo College costing approximately $15,000. Additionally, literature on total quality and other handouts will cost approximately $2,000.

The implementation of Goal Three will be the least costly. Textbooks and other materials on total quality for reference will cost approximately $2,000. A guest speaker or two may cost the hospital approximately $1,000.

Conclusions

The strategic apex establishes the vision, builds commitment, sets organizational goals, and is a role model in the implementation of total quality improvement. Essentially they "walk the talk." The technostructure sets improvement goals, improves customer and supplier relationships as well as being a role model in total quality. The nursing operating core also establishes improvement goals and establishes teams to improve patient centered problems. Total quality improvement is patient driven, and nurses can empower themselves to make a positive difference in each of their patients lives. The empowerment process is conducive to maintaining competency and commitment to total quality in the nursing staff. Competency may be defined as having necessary psychomotor skills in the technical aspects of care as well as the ability to interact well with the patient and family, while maintaining the dignity and self worth attributes of the human system.

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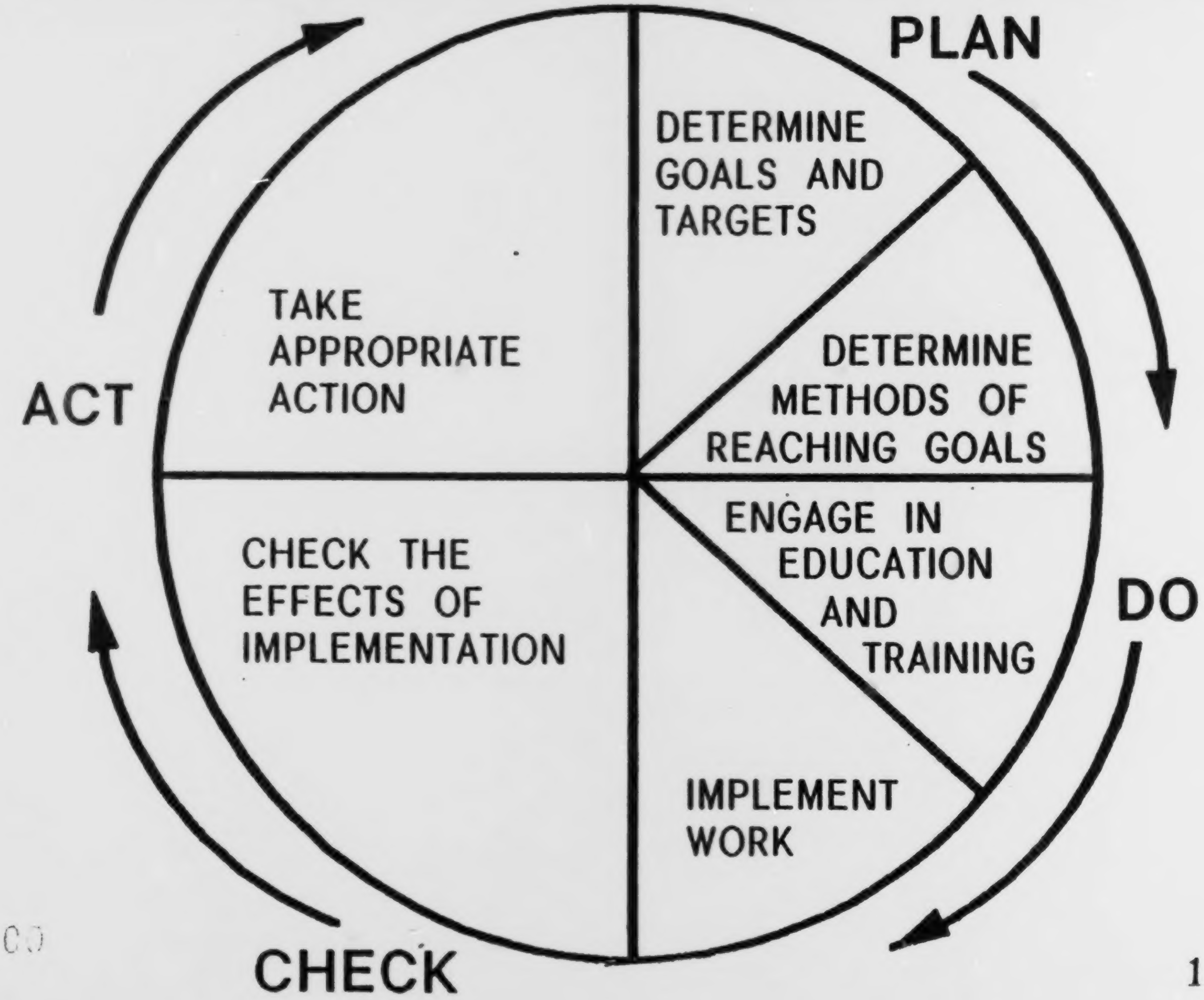
Appendix A

Deming's Improvement Cycle

DEMING'S IMPROVEMENT CYCLE



PLAN

DETERMINE GOALS AND TARGETS

DETERMINE METHODS OF REACHING GOALS

DO

ENGAGE IN EDUCATION AND TRAINING

IMPLEMENT WORK

CHECK

CHECK THE EFFECTS OF IMPLEMENTATION

ACT

TAKE APPROPRIATE ACTION

Appendix B

Goal I, 1993

GOAL: YEAR ONE - 1993

Facilitate Nursing staff's awareness of total quality improvement and promote basic concepts relevant to patient - nurse satisfaction.

OBJECTIVES:	1. To formally assess the nursing staff's comprehension of the importance of total quality at Northwest Texas Hospitals. 2. Assess nursings motivation and perception of organizational values laying the foundation of support for total quality. 3. To acknowledge the value of internal motives resulting in personal gains as well as organizational growth promoting patient satisfaction.
METHODOLOGY:	1. A needs assessment of nursings comprehension of total quality relevant to patient satisfaction has been implemented on the Medical- Surgical-Pediatric units and will encompass all of nursing service within the next six months. 2. Nursing education will train management through hospital based workshops ways to inspire their staff to motivate themselves. Principles of adult learning and motivation will be incorporated into the workshop. 3. Timothy Williams, M.S.N., R.N., Total Quality Management consultant is training executive and middle managers on principles of total quality. He will begin to focus on the operating core's role, at all levels of nursing service, in maintaining and enhancing patient satisfaction. 4. Nursing managers and their staff will focus on patient satisfaction questionairres in unit-based meetings. This will establish a vital link between the patient's perception of satisfaction and the process of total quality improvement. 5. Nursing educators will provide inservice training supporting quality improvement issues as identified by staff and management.
EVALUATION:	1. Will be familiar with and apply 15 factors that are necessary to promote patient satisfaction in the clinical environment. 2. Nursing staff at all levels will be able to define their perception of "empowerment" as it applies to personal and organizational growth. 3. Each nursing staff member, whether R.N., L.V.N., or N.T. will begin to synthesize and verbalize basic concepts relevant to total quality through attendance at hospital based workshops. 4. Nursing will verbalize the differences between traditional organizational management and total quality management.
ESTIMATED COST:	1. Consultant services, approximately $7,000. 2. Literature manuals, handouts for 500 nursing service personnel approximately $2,000.

Appendix C

Goal II, 1994

GOAL: YEAR TWO - 1994

Facilitate educational training programs to all levels of nursing staff and nursing management in the process of total quality.

OBJECTIVES:	1. To incorporate concepts of total quality from workshops conducted by Timothy Williams, TQM consultant, into a realistic plan of action to meet the needs of registered nurses, licensed vocational nurses, nursing assistants and unit secretaries. 2. Registered nurses in leadership roles will become aware and competent in the process of total quality management and will begin to demonstrate enthusiasm when assigned to a TQM team leading roles. 3. Licensed vocational nurses, nursing assistants and unit secretaries will participate in TQI teams when content of a specified patient centered problem is within the scope of their knowledge base. 4. Begin to facilitate the value of data collection and research to validate numerically and visually a patient centered problem. 5. Create a team atmosphere and involve all nursing personnel in decision making, problem solving, goal setting and planning.
METHODOLOGY:	1. Clinical educators will have a general knowledge of total quality and will present concepts to Registered Nurses in their departments incorporating role playing activities with actual and potential patient centered scenarios: *Brainstorming *Flow charting *Patient questionnaires *Team leader *Team facilitator *Team member *Histograms *Pareto charts *Scatter Diagram *Cause-effect diagram (fishbone) 2. Clinical educators will facilitate non-professional nursing staff commitment to total quality by involving them in ways patient care and human relation skills can be improved. Brainstorming sessions will be instituted with content being derived from patient satisfaction questionairres. Nursing staff role playing patient dissatisfaction will greatly enhance insight into the patients perception of quality improving the quality of care that is delivered. 3. Timothy Williams, M.S.N., R.N. TQM consultant and Debbie Nichols R.N. vice-president of quality improvement will conduct ongoing training to all levels of nursing service as well as the entire hospital. There are approximately 800 nursing service employees and 500 employees in ancillary departments. 4. Workshops on total quality through Amarillo College will be conducted.
EVALUATION:	1. Documentation of patient satisfaction /dissatisfaction presented statistically or in a diagram form that is located on each nursing unit so that all personnel may view. 2. Total quality improvement process is now ready for implementation at Northwest Texas Hospitals.
ESTIMATED COST:	1. Consultant fees approx-imately $4,000. 2. Workshop costs for Registered Nurses in key leadership roles is approx-imately $15,000.

Appendix D

Goal III, 1995

GOAL: YEAR THREE - 1995

Integrate Nursing into leadership roles in Continuous quality improvement teams, fostering insight and commitment to the process, encouraging empowerment and promoting patient satisfaction.

Incorporate concepts of continuous quality into the orientation of new nursing employees.

OBJECTIVES:	1. Incorporate concepts of total quality commitment into all aspects of care. 2. Relate all educational programs from a total quality perspective enhancing patient care. 3. Will enhance central nursing orientation with the incorporation of a 30 minute segment on total quality improvement.
METHODOLOGY:	1. Restructure existing educational courses at the hospital to incorporate total quality concepts. Objectives for each course shall be rewritten to focus on TQI. 2. Biennial review of total quality concepts will be incorporated via lectures, video programs, and guest speakers.
EVALUATION:	1. The vice-president of quality improvement shall monitor nursings participation in CQI teams and will provide these statistics to departmental directors. 2. Patient satisfaction questionnaires will continue to be monitored.
ESTIMATED COST:	1. Textbooks and other materials approximately $2,000. 2. Guest speakers approximately $1,000.

Appendix E

"How Important to You Perceive Quality Improvement to be in Your Job?

MEDICAL-SURGICAL NURSES' PERCEPTION OF Q.I. AT NWTH

"HOW IMPORTANT TO YOU PERCEIVE QUALITY IMPROVEMENT TO BE IN YOUR JOB"?

TITLE	#	SCORE
Managers	6	6.7
R.N. Staff	33	5.8
Licensed Vocational Nurses	16	6.9
Nursing Assistants	27	3.8
Unit Clerks	7	8.9

Appendix F

Adult Motivators

MOTIVATE Adults

> Create a need

> Develop a sense of personal responsibility

> Create and maintain interest

> Structure experiences to apply to life

> Give praise

> Foster wholesome competition

> Get excited yourself

> Establish long range objectives

> See the value of internal motives

> Intensify interpersonal relationships

> Give them a *choice*

Appendix G

Indicators of Patient Satisfaction

TOP 15 FACTORS IN PATIENT SATISFACTION

1. Staff concern for patient's privacy.
2. Staff sensitivity to the inconvenience of hospitalization.
3. Adequacy of family briefings on patient condition, treatment.
4. Overall cheerfulness of hospital.
5. Nurses' attitude toward calls from patients.
6. Extent to which nurses took patient's problem seriously.
7. Nurses' attention to patients' personal and special needs.
8. Courtesy of technician who took patient's blood.
9. Technicians' explanations of tests and treatments.
10. Likelihood of recommending hospital.
11. Nurses' friendliness.
12. Nurses' promptness in responding to call button.
13. Nurses' information about tests and treatments.
14. Technical skill of nurses.
15. Skill of technician who took patient's blood.

Appendix H

Key Leadership Roles in Continuous Quality Improvement Teams

WHY TEAMWORK IN QUALITY IMPROVEMENT?

- "None of us is as smart as all of us"
  - Better Ideas
  - More Ideas
- Involves the people who know best
- Involves employees in solutions
- Maintains pride and interest in work
- Instills ownership of the process
- Creates respect, cooperation, openness
- Spreads Quality
- Gives everyone some "air time"
- Strength in unity

TEAM LEADER

A team leader is also a team member.

Roles:

Prepares the meetings.
Conducts meetings.
Assigns responsibilities/activities to team members.
Provides direction.
Assesses progress.
Interfaces with other teams and support resources.
Represents the group to management.

Responsibilities:

1. Pre-meeting preparation
    a. Set agenda and distribute.
    b. Arrange for meeting place.
    c. Arrange for needed visual aids and equipment.
    d. Organize others to present information.
    e. Ensure the meeting records are updated prior to meeting.
2. During the meeting
    a. Greet everyone.
    b. Review team progress toward goal.
    c. Lead team through agenda.
    d. Arrange for note-taker.
    e. Involve team members in meeting.
3. Post-meeting activities
    a. Follow up with members as needed.
    b. Provide guidance to members as requested.
    c. Ensure that meeting minutes (who is doing what, when?) are completed and posted.
    d. Complete records of team meeting.
    e. Communicate and coordinate with sponsor, facilitator, and trainer.

A team's first leader is usually the highest level supervisor on that team. In time, however, other team members can and should assume the role. Leaders obtain skills and desirable characteristics over time with training and with practice. Being a group leader is a part of the training for the leader.

Desirable leadership characteristics

Ability to listen
Helpfulness
Accepts other's ideas
Ability to focus
Enthusiasm
Sensitivity

TEAM FACILITATOR

Roles and Responsibilities:

- Help the leader.
- Seek opinions.
- Coordinate different ideas.
- Test for consensus.
- Apply tools and techniques.
- Summarize key points.
- Provide feedback to the group.

The facilitator should elicit the opinions of less vocal members of the team and make certain that powerful personalities do not dominate. He/she should be more concerned with process than involved in content.

The facilitator can help team leaders by:

- Helping to prepare for meetings.
- Consulting on the use of TQC tools and techniques.
- Recommending the use of staff specialists or experts.
- Sharing experiences and results of other teams.
- Helping to critique the effectiveness of the team meeting.

Desirable Characteristics of a Facilitator

Observant
Neutral
Trustworthy
Polite
Good memory

Empathetic
Adaptable
Patient
Flexible
Sense of humor

Even-tempered
Non-judgemental
Centered
Objective

Articulate
Calm
Perceptive
Firm

January 11, 1993

Dear Dr. Groff:

Please feel free to utilize any of the professional papers that I have submitted to you in the governance and management seminar. Thank you for considering my papers as an example for your future classes.

Sincerely,

Richard Pullen

Richard Pullen, M.S.N., R.N.

AN ANALYSIS OF HUMAN RESOURCES DEVELOPMENT
AT ARKANSAS TECH UNIVERSITY

Human Resources Development

by

Kathryn D. Pearson, M.Ed.
Arkansas Tech University

Warren H. Groff, Ed.D.
Springfield, Missouri Cluster

A seminar paper presented to Nova University in
partial fulfillment of the requirements for the
degree of Doctor of Education

Nova University

October 16, 1992

Organizational Setting

Arkansas Tech University, with its 517-acre campus, is located on the northern edge of the city of Russellville, a growing community with a population of approximately 21 000. Arkansas Tech is a multi-purpose, state-supported university offering eight degrees ranging from associate to masters level. Arkansas Tech University has experienced an increase in enrollment every semester for the past eight years, growing to the current fall enrollment of 4600 students.

Arkansas Tech University is in the center of an area experiencing vigorous industrial development. Several national concerns have located plants in this area, among them Nuclear One. Also located in Russellville are headquarters for District 9 of the Arkansas Highway Department and the Ozark-St. Francis National Forests. Principal money crops in the area are poultry, soybeans, cotton, and lumber.

Mission Statement

The present and future mission of Arkansas Tech is to provide an atmosphere conducive to intellectual growth for students and faculty, as well as providing service and research for the community and state, especially in the area of economic development. The actual mission statement is found in the appendix section of this paper.

Analysis of HRD at Arkansas Tech

For this assignment I chose to concentrate on areas of concern related to faculty and students--the areas in which I can facilitate change.

Organizational strengths related to faculty concerns

Both the present and future mission statements place emphasis on faculty development (FD) in recognition of its tie to quality instruction. Commitment to FD, however, must manifest itself in actions. Budget allocations for faculty development include individual departmental funds to support professional travel, attendance at professional conferences, and resources external to the University. The total FD budget allocation for academic departments for 1992-93 is $71,000. Part of the mathematics FD fund went to purchase graphics calculators for each department member last year. Additionally, faculty development funds administered through the school deans and Vice President for Academic Affairs support sabbatical leaves, research grants, advanced graduate study, and special growth/development opportunities. The Faculty Salary, Benefits, and Awards Committee assists the academic administrators by providing peer review and recommendations, and by promoting and processing faculty development activities.

One critical element of HRD effectiveness is anticipation of training needs associated with organizational changes (Chalofsky & Reinhart, 1988). Training seminars and workshops on computer technology, funded through the Executive Vice President's office, are conducted several times each academic year for interested faculty and staff. The budget allotment for training this year is $7,500.

All policies pertaining to faculty are enumerated in a detailed faculty handbook that is updated every five to ten years. The handbook is divided into four sections related to the university, academic governance, students, and administrative procedures.

In September 1991, each school within the university adopted a faculty performance appraisal system. All faculty members participated in the development process. Employee commitment to an organizational plan is needed for successful implementation (Rothwell & Kazanas, 1989). Before this, the only documentation concerning performance appraisal was a student evaluation form that was required each semester for all non-tenured faculty and once each academic year for tenured faculty. Rothwell and Kazanas (1989) state that performance appraisals provide assessment as a catalyst for planning improvement. A yearly planning process increases awareness of skills and knowledge necessary for career advancement and response to new trends or technology (Bard, Bell, Stephen & Webster, 1987).

Organizational weaknesses related to faculty concerns

Chalofsky and Reinhart (1988) find that good communication in the organization contributes to HRD effectiveness. ATU suffers from ineffective communication on many levels. There appears to be more competition between schools across campus than cooperation.

A new masters degree in liberal arts was recently approved. Some faculty members feel this degree creates competition with our existing masters in education. Yet, as the Dean of Liberal Arts pointed out, this degree allows students to tailor their programs to specialization areas. This could enable departmentalized elementary teachers to focus on in-depth courses in their concentration areas, rather than general courses over all subject areas. Because ATU serves a wide area of teachers, this could be beneficial to the math department in the area of service.

Another area of weakness involves new faculty members. ATU has no orientation for new faculty members. Although many new faculty members have previous experience in higher education, adapting to a new setting takes time. Each university has its own culture (Rothwell & Kazanas, 1989). Since Tech is my undergraduate institution, returning as a faculty member was easier in some respects. However, as the only female faculty member in the math department for six years, I felt somewhat disadvantaged. Many of my colleagues previously were my teachers. While I could seek their advice on departmental concerns, there were other areas they could not address. Having a mentor (Bard, Bell, Stephen & Webster, 1987) in my first few years could have resulted in an earlier understanding of career advancement.

In addition to regular new faculty, ATU now employs graduate assistants (GAs) in the areas of mathematics, English, and physical education. The GAs in mathematics and English teach developmental courses. The majority have no teaching experience besides student teaching. The greatest concern is for the students they instruct. Developmental students often have poor self-concepts and suffer from math anxiety. It is crucial that these students have quality instructors that believe they are capable of success. A significant number of our developmental students are adults. According to Knowles (1980), adult learners need provisions for individual differences in learning styles. Rothwell and Kazanas (1989) report that one future technological trend is the availability of knowledge on human learning and motivation. Training experiences should be implemented for these faculty members as well as all faculty serving adult learners.

Organizational strengths related to student concerns

Arkansas Tech prides itself in being responsive to student needs. Both the present and future mission statements place a high priority on maximizing student achievement. The future mission addresses provisions for academically gifted students through an honors program. Provisions for students requiring remediation are also made. Entering freshmen participate in orientation experiences to ease the transition to college. These experiences include small-group sessions with student leaders dealing with issues such as drugs, alcoholism, and student leadership. Arkansas Tech also publishes a student handbook, updated annually, that furnishes students with comprehensive information regarding their needs and responsibilities.

According to Kiplinger & Kiplinger (1989), the growth market for higher education over the next decade is in adult education. The future mission also recognizes the responsibility of the University to meet the needs of the community through training seminars and courses. Arkansas Tech and industry, particularly Nuclear One, have maintained a mutually beneficial relationship over the past ten years. One outgrowth of this is the

Center for Energy Studies which will be completed within the next year. A mini nuclear reactor will allow research to be carried out for industry and also provide further training opportunities. The partnership has also spawned an associate degree in nuclear engineering, the only one of its kind in the state.

Functioning in a global society necessitates knowledge of languages and cultures (Kiplinger & Kiplinger, 1989). One of the priority goals for the University is that of cultural and global awareness and diversity. Global Fest, an event jointly sponsored by the University and local Chamber of Commerce, encourages cultural awareness. Area schools bring their social studies students to experience other cultures through native costuming, ethnic customs and food. Audience participation is encouraged in seminars held throughout the festival.

Arkansas Tech also has a commitment to increased racial and cultural diversity among students and faculty. In addition to a student exchange program with a sister school in Westfield, Massachusetts, Arkansas Tech hosts international students and now employs a director for international studies. These programs broaden student perceptions and understandings of our global society more effectively than studies alone.

In the summer, the University is host to a foreign language immersion camp for public school students.

Child Development, Inc. operates a nationally recognized child-care facility on the Arkansas Tech campus providing quality child-care for low-income families. This program has encouraged many parents to continue their education. In Dateline 2000 (1990), Parnell asserts that child-care centers will soon be located on all university and urban campuses.

Organizational weaknesses related to student concerns

While Arkansas Tech is responsive to student needs, there are always areas that could be improved. One such area involves the needs of developmental studies students. Parnell (1990) devotes an entire chapter to the topic of the population at risk. He contends that not only are these under-prepared students at risk but that they place future society at risk as well. A state mandate requires remediation of at-risk students before entering college-level courses. Universities and colleges alike share the responsibility of providing developmental courses to prepare these students for college-level work. Arkansas Tech provides two developmental courses in mathematics and one in the areas of English and reading.

Research concerning the retention and success rate of these students must be conducted. The lack of success of some students may be attributed, in part, to our methods of instruction. If we are to continue to serve these students, alternative methods of delivery should be investigated. This summer I conducted a simplified cost analysis of our developmental program for Dr. Quinlan and discovered monetary and staffing inequities between mathematics and English. Unfortunately, administrative decisions are not always based on hard data. Ineffective communication seems to hamper progress.

The other major area of weakness that I have seen is student advisement. A student advisement program in place does appear to work for the majority of students. However, undeclared students, from the time they enter the University until they declare a major, have no assigned advisor. The Philosophy department is officially responsible for these students since they have no majors but the department is not properly equipped. These students wander across campus looking for anyone to sign their registration forms. There is no shame in being unsure of a future vocation. Many of these students need more personal contact and advisement than declared students. Attempting to broach this subject with several people associated with the process has netted the same response--there is no better way to handle it. Perhaps Conklin's book (1979) will help me become more persuasive.

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APPENDIX

Mission Statement

The present mission of Arkansas Tech (1989) is:

> To provide and nurture an intellectual environment in which programs of academic excellence can be developed and maintained and where intellectual development of students and faculty is maximized. Programs offered by the University will effectively promote full participation in society and assist students in the pursuit of personal, professional, and occupational goals. Emphasis is placed on undergraduate programs; graduate programs are available for persons pursuing careers in public and private education.
>
> To provide service functions to the general public with special emphasis on economic development of the state, improvement of public education, and support to social services.
>
> To promote research that: enhances the educational programs of the University; fosters the development of student competencies in the general research process; and, stimulates economic development.

Future Mission Statement

As Arkansas Tech University continues its development toward the twenty-first century its mission will be expanded.

Quality teaching will continue to be the goal for all academic programs. Student recruitment and retention will be addressed through an increase in the quality and expansion of academic, student, and administrative support services. The needs of students with special abilities will be addressed through a university honors program. Existing programs to address the special needs of students will be refined and other programs developed as the need arises.

A professional development program for faculty and administrators will be developed to better meet the needs of the individual, the university and the students.

During the immediate future emphasis will be placed on the improvement of existing graduate programs and the development of others which promote economic development and educational opportunities for area adults.

A high priority will be placed on maintaining existing program accreditation and university accreditation by the North Central Association of Colleges and Schools and to seek professional accreditation for all programs for which accreditation standards exist.

Public service activities of the University will be enhanced over the next few years. Steps will be taken to expand and define partnerships with business, industry and educational and social agencies for the purpose of common good.

Research effort at the University for both faculty and students will be improved and expanded to better complement the curriculum, support instruction, and respond to the economic development needs and opportunities of Arkansas.

A NEW VISION FOR
ELEMENTARY SCHOOL MATHEMATICS
AT ARKANSAS TECH UNIVERSITY

Human Resources Development

by

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Introduction

As we approach the twenty-first century several trends are inescapable. We live in the age of information where accelerated technology development is constantly forcing us to reevaluate maintaining status quo. The impact of this technological shift is reflected in economic reality. It is claimed that the "most significant growth in new jobs between now and the year 2000 will be in fields requiring the most education" (Lewis, 1988, p.468).

New Societal Goals for Education

Historically, society has established schools to transmit its culture to the young and direct students toward, and provide them with, opportunities for self-fulfillment. Our schools, a product of the industrial age, do not meet the economic needs of today or the future. New social goals for education include (1) mathematically literate workers, (2) lifelong learning, (3) opportunity for all, and (4) an informed electorate (NCTM, 1989).

Mathematical literacy in this technological age is no longer a luxury but a necessity for economic survival. Yet, according to a 1989 study conducted by the Southern Regional Education Board (SREB), about one-third of the entering college freshmen are enrolled in some type of remediation. The SREB study also found that the percentage requiring remedial mathematics is significantly higher than those requiring remedial reading or writing. At Arkansas Tech University (ATU), about half of the first-time freshmen require remediation.

The Failure of Mathematics Education

It is no longer news that mathematics education in America is a failure. Various reports, such as *A Call for Change,* Mathematical Association of America (MAA); *Everybody Counts,* National Research Council (NRC); and *Curriculum and Evaluation Standards for School Mathematics* and *Professional Standards for Teaching Mathematics*, National Council of Teachers of Mathematics (NCTM), document the current state of mathematics education.

The fact that many students are entering college with poor mathematical skills indicates something is wrong with our current educational system. Past social injustices in schooling practices can no longer be tolerated. We can not afford a mathematically illiterate population in a society where mathematics has become the filter for employment and full participation.

Henry Pollak (1987) summarized the mathematical expectations for new employees in industry as follows:

- The ability to set up problems using appropriate operations

- Command of various techniques to solve problems
- Understanding of the mathematical foundation of a problem
- The ability to work cooperatively on problems
- The ability to apply mathematical ideas to varied problems
- The confidence to deal with open problem situations which are characteristic of the real world
- Belief in the utility and value of mathematics.

Meeting these expectations will require more than the lip service that has been afforded mathematics education in the past. It will involve rethinking what mathematical literacy means.

The failure of mathematics education in America can be traced, in part, to the preparation of our elementary school teachers (Cipra, 1992; Trafton, 1992). Mathematical experiences in the elementary school lay the foundation for further mathematical study. Any effort to restructure mathematics education must begin at elementary level.

Rethinking Mathematics Education

Reform in mathematics education embraces a new prospective--that *knowing* mathematics involves *doing* mathematics. This view has sparked fundamental rethinking of mathematics programs, courses, and instruction at all levels. The Standards document (NCTM, 1989) provides a comprehensive view of what it means to be mathematically literate for students in levels K-12. This report assumes all mathematics teachers are comfortable with mathematics beyond the level they teach (Cipra, 1992). Unfortunately, this assumption about prospective elementary teachers is false. Mathematical preparation of elementary teachers vary from state to state. In states where there are no specific guidelines, it also varies between institutions. The great majority of elementary education majors are females. Tomhave and Kelly (1985) administered the Math Anxiety Rating Scale (MARS) to selected groups of students and found that female elementary education majors exhibited a high degree of math anxiety. One serious implication is the perpetuation of their math anxiety to young girls in their own classrooms.

The Rationale

It is logical to attack the problem of elementary school mathematics education at college level. Elementary teachers have routinely been accused of possessing insufficient knowledge of mathematics. Recent efforts to overcome the deficiency involve requiring more "traditional" mathematics courses of elementary education majors. This narrow view, taken by many mathematics professors, is too simplistic. First, these students enter the university setting with strong beliefs about mathematics and their ability to do mathematics. Traditional courses may reinforce the negative beliefs of students and provide inadequate preparation for the challenge of teaching. Second, if the adage "Teachers teach the way they are taught" is true, then mathematics education instructors must be reeducated. They must be able to model effective teaching of elementary mathematics concepts. This is a difficult task, considering that many mathematics professors have never taught outside the university environment.

Even more troublesome is the fact that in many mathematics departments, courses for elementary education majors rank low in preferred teaching assignments. I believe, like Musser, that "all mathematics departments should have faculty whose primary interest is in the mathematical preparation of elementary school teachers." (p.8) It remains to be seen whether universities are committed to these necessary changes.

A New Agenda for Mathematics Education At ATU

In considering the future of mathematics education for elementary teachers a range of factors were considered. The appendix contains charts that depict a view of life at the twenty-first century. After deliberation, three scenarios seemed possible: (1) maintaining status quo, (2) partial restructuring and (3) total restructuring. What follows is a discussion of the three alternative scenarios.

Scenario One

The first, and most obvious, is to maintain status quo. Mathematicians tend to look at educational reforms as passing fancies, ones that do not stand the test of time. In this scenario we would continue to educate prospective elementary teachers in the same manner we currently employ. Course curricula will remain textbook driven and the primary mode of instruction will be lecture. The existing course structure of twelve hours (3 hours gen.ed., 6 hours content, 3 hours methods) will remain intact.

Several factors may support this approach. Shortly after our first class meeting the president of ATU announced his plan to retire in June of 1993. He has been the president of ATU since 1972. Two weeks ago, our Vice President of Academic Affairs, died unexpectedly from complications following a surgery. Concern for the future of our institution is widespread. It may be difficult to affect changes in light of the uncertainty of the immediate future. Budgetary policies may be significantly different under a new administration.

This scenario, while safe, seems unrealistic. Despite all efforts to the contrary, education can not stand still. Standing still translates into losing precious ground in the effort to reach all students. Another threat to this approach is the probability of state-mandated regulations geared toward accountability (Parnell, 1990).

Scenario Two

The second scenario involves a piecemeal restructuring of the elementary mathematics program at ATU through changes in some aspects of course structure and instructional methods. This scenario involves reactionary change in response to the perceived future. We acknowledge that our present structure is inadequate to meet the needs of future elementary teachers and attempt to correct the deficiencies.

The obvious assumption here is that the existing program will be enhanced. It is also assumed that these changes will not adversely affect other components of the existing program. Small changes will meet with less resistance from faculty. However, this method is analogous to attempting to plug holes in a leaking boat. At some point, the structure may be damaged beyond repair. This type of effort can result in further fragmentation of the existing program. This scenario can not make effective use of the technology that will be available. Use of technology requires a planned effort--one that considers the overall program and its place in that program. It is difficult to affect quality changes using this approach.

Scenario Three

The third and preferred scenario involves total restructuring of the existing program through long-range strategic planning. It requires the willingness of the department to adapt to massive changes in course structure, content, and instructional methods. Additional faculty with a strong commitment to the mathematical preparation of elementary teachers are needed. Several faculty members will be retiring within the next five years. Now is the time to determine the direction for the future.

Strengths include lab facilities that will be available by next fall, including some microcomputer stations and classrooms designed specifically to meet the needs for activity-based instruction. There are multiple opportunities in the form of collaborations with local industries and public schools (Parnell, 1990; ATU Long-Range Plan, 1989). Additional microcomputers and facilities may be obtainable through partnerships and grants.

This scenario also involves a renewed commitment to meeting the educational needs of in-service elementary teachers. Care must be taken to involve them in the process of determining those needs. A mutually beneficial relationship, supported by our mission statement, can ensue. Teachers committed to teaching mathematics using the Standards (NCTM, 1989) can help effect positive change in the education of preservice teachers by sharing their expertise and providing experiences for prospective teachers.

As previously discussed, projections of unpreparedness of workers in the future point to the need for change. Change is complex and progress takes time. In the past, much educational restructuring has been reactionary, not accounting for alternative futures. Long-term and short-term strategic planning is needed to direct curricula reform. Anticipation of "roadblocks" along the way is crucial. It is also important to recognize that strategic planning is an ongoing effort. Although this approach demands the greatest HRD commitment, it also has the most potential for success.

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APPENDIX

AMERICA 2000

A VISION OF THE FUTURE

1992 1994 1996 1998 2000

Demographics

College population becomes equal parts under and over age 25
16-24 year-olds comprise only 16% of the population
One-quarter of the nation's young children live in poverty
Women become the workforce majority
Hispanics become the dominant minority
Adults become growth market in education
Thirty-five million Americans over age 65
90% of workers in service industries
Growth of urban America

Economics and Politics

Three-fourths of all jobs require some form of post-secondary education
New wealth of America--require persons that excel in mathematics, science, and applied technology
Scarcity of resources
Declining college-educated workforce due to educational costs
Increasing average age of workers
Business invests $100 billion in worker training
Equal pay for equal work
Improved pay and working conditions for teachers

Education

Increased emphasis on staff development
Federally mandated national HRD policy
Re-defined missions in higher education, geared to needs of constituents
Student support services expanded
Curriculum instruction embraces learning theory
New emphasis on civic responsibility
Foreign language study required
Partnerships--business, community, education
Flexible programs for grades eleven through fourteen
Accountability measures for institutional effectiveness developed by accrediting agencies
New broader definition of 'college student'
'Grow your own' programs to achieve faculty ethnic balance

1992 1994 1996 1998 2000

Education (continued)

Aggressive recruitment of minorities in higher education
Commitment to quality and equality at all levels
Competency-based approach
Life-long learning

Technology

Increased computer literacy
Multi-media
Interactive video
Voice-activated computers
Computers link libraries, schools, homes
Information explosion
Computer efficiency causes reduction in labor
Increased use of teleconferencing and electronic mail
More "telecommuters"

Values

Return to community spirit
Continued early retirement
Greater concern for spiritual well-being
Renewed code of ethical behavior

References: Dateline 2000, America in the Global '90s, Strategic Human Resources Development, The Learning Enterprise.

THE RESTRUCTURING OF
DEVELOPMENTAL MATHEMATICS
AT ARKANSAS TECH UNIVERSITY

Human Resources Development

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Introduction

The developmental program in mathematics at Arkansas Tech University (ATU), which is mandated by State law, consists of two courses: Math 0803 Basic Mathematics, which is an introductory algebra course, and Math 0903 Intermediate Algebra, which is the pre-requisite to college credit mathematics courses. Students who are required to take developmental mathematics must achieve a grade of "C" or better in Math 0903 before being permitted to enroll in college credit mathematics courses.

The Problem

Approximately sixty percent of all entering freshmen students admitted to ATU have been required to take developmental mathematics since the fall semester of 1987. During this period, only fifty-five percent of all students that enrolled in Math 0803 have successfully completed the course (i.e., made a grade of A, B, or C). The rate of successful completion in Math 0903 during this same period was fifty-six percent. Remedial math study frequency tables are found in appendix b of this report. In addition, a study of students who have taken Math 0803 reveals that those who make a grade of C are at risk of retention until degree completion. Furthermore, those students who successfully complete developmental mathematics encounter difficulties in completing subsequent college level mathematics courses.

All students at ATU must complete a minimum of three semester credit hours of mathematics and many majors require more, making it apparent that those students who are required to take developmental mathematics are at severe risk of not being retained until degree completion. In order to address these concerns, it is proposed that the developmental mathematics curriculum at ATU be restructured.

Rationale

Restructuring developmental mathematics is based on the belief that mathematics is accessible to and can be mastered by *all students*. Research has shown mathematics to be the biggest barrier to overall student achievement and success (National Council of Teachers of Mathematics, 1989). The lack of success of traditional methods of teaching these courses has been noted in recent publications such as Moving Beyond Myths: Revitalizing Undergraduate Mathematics by the National Research Council and Curriculum and Evaluation Standards for School Mathematics by the National Council of Teachers of Mathematics.

Purpose

The purpose of this program is to substantially increase the rate of success of students enrolled in developmental mathematics, thereby elevating success in college mathematics and retention of these students to degree completion.

Goals

The following goals have been set for the developmental mathematics program at Arkansas Tech University.

- Develop and implement a unique, innovative competency-based developmental mathematics curriculum that is replicable.
- Create a successful learning environment for all students enrolled in developmental mathematics, based on individual learning styles.
- Utilize technology and activity-based tools to provide students with experiences designed to develop mathematical concepts.

Methodology

The execution of this program will occur in three phases, with each phase representing one year. The conceptual framework for this program has its origin in the early works of John Dewey and Francis Parker. Parker believed the child's natural approach to learning should determine methods of instruction (Ornstein & Hunkins, 1988). The most well-known proponent of learner-centered instruction in recent times is Malcolm Knowles, who applied this concept to adult learning theory. He subscribes to the notion that the teacher is to assist learners rather than to transmit knowledge (1980).

The three phases of this program represent the natural progression of transmitting an idea into action. Phase one is research and development, phase two is program implementation and training, and phase three is program dedication and assessment. An overview of the complete program is located in appendix a of this report.

Two faculty members will serve as program directors. Prior to phase one, a permanent faculty member will be hired to allow half-release for research and development by the program directors. A person with math education background will be sought for the new position to provide additional assistance with training once the program is in place. Additional faculty are needed to reduce class sizes which now average 40 students per section. Grant proposals will be prepared and submitted to obtain additional funding for this program.

Phase One

In the research and development phase, course curricula will be revised using competency-based objectives. A literature survey will be conducted to identify quality competency-based programs in existence. Additional data from quality programs will be requested and analyzed. One quality program will be visited if funds permit. Texts will be reviewed for selection and supplemental materials will be developed. A consultant will be contracted to assist with course develop and evaluation.

A survey of literature will be conducted on learning styles. Available software for assessment of learning styles will be identified and previewed. Alternative resources for determining learning styles will be investigated. After careful deliberation by program directors, the learning styles assessment tools will be selected and purchased. Instructional strategies will be developed to address learning style preferences. A tool will be developed to assess program effectiveness.

In-service workshops will be held to introduce faculty, graduate assistants, and student workers to the learning styles assessment tool. Staff will be trained to utilize the tool and interpret results.

Technology plays a large role in this program, both for instructional and administrative purposes. A new mathematics laboratory, part of a current renovation effort, will be utilized in this program. Additional computers to fully equip new lab facilities will be purchased during the first year of the program. Instructional materials and software purchases will be pro-rated over the three years of the program.

Evaluation

Review of course curricula and software will be conducted by the consultant and faculty. State guidelines will be applied to course content. Course curricula will also be measured against program goals. Upon department approval, equipment purchases will be made.

Phase Two

In this phase, the program will be implemented and additional training will take place. The new course structure will be piloted in selected sections by the program directors. Upon placement in the pilot sections, student learning style assessment will take place. Instructional strategies will focus on adapting to individual learning styles by use of a variety of methods such as cooperative grouping and activity-based learning. The program will be carefully monitored and adjustments will occur as indicated.

Technology will be used to assess student learning styles and to prescribe individual remediation. Math manipulatives will be employed to teach concepts in a concrete fashion. Students in the program will have access to technology to enhance learning. Data collection and analysis to monitor program effectiveness will also be accomplished using computer technology.

Additional staff training will take place. The focus will be on assisting faculty in development of instructional strategies for individual learning styles. After program modifications are made, staff workshops will be conducted to prepare for complete program dedication.

Evaluation

Pilot courses will be evaluated by use of a mid-term student survey and student evaluation of course (instructional strategies, supplemental materials, and teaching effectiveness). Positive student responses will be one indicator of program effectiveness. Comparisons of success rates of program students and traditional students will also be made. Additional data will be analyzed.

Phase Three

Complete program dedication and assessment will occur in the third year. All course sections will reflect the program structure. Prior to admittance to developmental courses, all students will participate in learning style assessment and results will be presented to respective course instructors. Curricular delivery will then be based on individual student learning preferences. Examples of delivery systems are programmed learning, cooperative groups, problem-based learning, and activity-based learning.

Students will progress through courses based on mastery of stated competencies. Time, not achievement, will become the variable in the learning process. This will produce an effective learning environment for all students.

Results of this program will be disseminated through articles written for journal publication and presentations at professional meetings. Pending successful implementation, plans will be made to market a brochure to be sent to area high schools, making students aware of our program. An increase in freshmen enrollment may be anticipated, due to the success of this program.

Evaluation

At the end of the third year data will be collected and analyzed. Program effectiveness will then be assessed using the criteria developed in phase one. The expectation is that student learning will be enhanced, resulting in more successful completions of developmental courses and improved performance in college level courses.

Budget

Program components must be linked to operating costs. The following page displays the projected costs associated with this program itemized by year and categories.

DEVELOPMENTAL MATHEMATICS PROGRAM BUDGET

Year 1

Personnel (1 faculty - math ed.; includes fringes)	$39,000
Consultant (course development)	3,000
Travel (regional and national NADE)	1,000
Software and instructional supplies	10,000
Microcomputers (21 @ 1750)	36,750
Projection unit	4,000
Network cards (29 units @ 150)	4,350
T concentrator cards (2 @ 1000)	4,000
File server (486-50)	3,500
Subtotal	$105,600

Year 2

Personnel (1 faculty)	$39,000
Travel (regional and national NADE)	2,000
Software and instructional supplies	10,000
Subtotal	$51,000

Year 3

Personnel (1 faculty)	$40,500
Travel (regional and national NADE)	2,000
Software and instruction supplies	5,000
Dissemination of project	1,000
Subtotal	$48,500
Total	$159,100

Conclusion

This program proposal is centered on several key beliefs about education. The first defines education as the process through which we discover that learning adds quality to our lives (Glasser, 1990). Until students are convinced that learning will improve their lives, they will continue in mediocrity. Second, all students can achieve a higher level of learning. As Bloom states, most students can master what we teach in a system not based on time. We, as educators, must be convinced that our students are capable of achieving. Finally, I believe that self-concept is the key to unlocking human potential. Students must believe in their own capabilities to learn and experience success.

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APPENDIX A

RESTRUCTURING DEVELOPMENTAL MATHEMATICS AT ARKANSAS TECH UNIVERSITY

The purpose of this project is to substantially increase the rate of success of students enrolled in developmental mathematics, thereby elevating success in college mathematics and retention of these students to degree completion.

Goals
The specific goals are to:

1. Develop and implement a replicable competency-based math program
2. Create an effective learning environment based on individual learning styles
3. Utilize technology and activity-based tools to provide quality learning experiences

Year 1: Research and Development

Objectives

1. Revise course curricula using competency-based objectives
2. Select tool to determine student learning styles
3. Train staff on assessment of learning styles
4. Purchase equipment and software for new math lab

Methodology

* Hire 1 additional faculty member to provide release time; survey literature to identify quality competency-based programs; attend professional seminars

* Write course objectives; review/select text; develop supplemental materials; design assessment model for program effectiveness

* Preview available software for assessment of learning styles; investigate other possible resources for determining learning styles

* Place order for equipment and software

* In-service training for staff on using software to diagnose and interpret learning styles

Evaluation
Review by consultant and faculty;department approval; adherence to state guidelines; recommend equipment and software purchase

Budget
1 faculty member, $39,000; travel, $1,000; consultant, $3000; equipment, $52,600; software and instructional supplies, $10,000

Year 2: Program Implementation and Training

Objectives

1. Implement new course structure
2. Implement learning style assessment
3. Modify course structure, as indicated
4. Train staff to develop instructional strategies for specific learning styles

Methodology

* Pilot new courses with selected groups

* Use learning styles assessment tool with pilot group

* Monitor program effectiveness and adjust

* In-service training for staff on instructional strategies

* Attend professional meetings

* Prepare staff for program dedication

Evaluation
Mid-term survey of students; End of course student evaluation of course (instructional strategies, supplemental materials, and teaching effectiveness);comparison of success rates in pilot and traditional classes; continue evaluation through additional data collection

Budget
1 faculty, $39,000; travel, $2,000, software and instructional supplies, $10,000

Year 3: Program Dedication and Assessment

Objectives

1. Competency-based program fully implemented
2. Individual learning contracts are developed
3. Technology and activity-based learning is accessible to all students
4. Program effectiveness is assessed.
5. Program information is disseminated

Methodology

- All courses and sections utilize program curricula
- Learning style assessment of all students before entry into program courses
- Curricula delivery for all students is based on individual learning styles
- Data collection using assessment tool
- Marketing brochure developed; brochure circulated to all area high school counselors
- Presentation at professional conferences
- Journal article

Evaluation

Student mid-term survey; student evaluation; department discussion; campus-wide faculty survey; program effectiveness assessment; interest expressed by other institutions

Budget

1 faculty, $40,500; travel, $2,000, software and instructional supplies, $5000; dissemination costs, $1000

I authorize Warren H. Groff to use my papers from HRD for whatever purposes he sees fit.

Signed: Kathy Pearson
Date: 1-8-93

VISION 2000: A PEDAGOGY SHIFT- CRITICAL THINKING AND CARING

STRATEGIC HUMAN RESOURCE DEVELOPMENT PLAN FOR RESTRUCTURING NURSING DEPARTMENT CURRICULUM

SOUTHWEST MISSOURI STATE UNIVERSITY
WEST PLAINS CAMPUS
Human Resource Development Seminar

by
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A seminar paper presented to Nova University in
partial fulfillment of the requirements for the
degree of Doctor of Education

Nova University

December, 1992

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Introduction

In the world of rapidly changing technology it is an impossibility to teach every skill to nursing students that might be necessary for them to become a caring, competent, safe practitioner. Trying to keep up with new procedures using sophisticated equipment is impossible for nursing program faculty. The textbooks are also unable to keep up. Thus the use of new state-of-the-art equipment that is changing so soon machines are almost obsolete before mastering operations coupled with nursing's agenda for health care reform (1991) has produced a need for change. One necessary student characteristic is critical thinking. Certainly the client will benefit as nursing tries to standardize education through a changed hegemony (Bevis and Murray, 1990) couched in critical thinking using more emancipatory teaching techniques and curriculum.

Rationale For Change

Certainly most nursing programs cannot afford clinical laboratory experiences demonstrating use of twenty-first century equipment. As hands on experiences often are not available, many schools of nursing have started using critical thinking techniques for teaching nursing students the art of safe clinical judgment. This method allows reasoning and problem solving that will not outdate or become obsolete through the years. Benner (1984) ties clinical judgment to critical thinking as the novice nurse develops to expert status through education and teaching.

Gould and Bevis (1992) believe nursing education and health care itself may suffer if critical thinking, caring, a sense of community awareness tied to a moral dedication for change, and a different praxis is not forthcoming. Em O. Bevis, a well known nursing educator and consultant, while speaking at a seminar in Springfield, Missouri during October 1992 defined praxis as having many characteristics such as: (a) based on reality, (b) oriented to inquiry, (c) reflective of action, (d) altering theory and practice, (e) necessary to the viability of practice fields, and (f) phenomenological in occurrence.

Critical thinking is defined many ways. It embodies: clarity, sound reasoning, accuracy, consistency, and quick understanding. It is an intellectual process allowing the nurse to use gathered data to analyze, synthesize, respond, and evaluate. Educators throughout higher education are calling for all students to develop the critical thinking reasoning ability when reading, listening, writing, or speaking. Nursing educators such as Bevis and Clayton (1988) began sounding the call for curriculum change during the last decade. Dr. Richard Paul (1992) advocates starting critical thinking teaching in kindergarten through grade three. He encourages teachers to remodel their lesson plans to incorporate critical thinking. This seems contradictory to Miller and Malcolm (1990) who suggested baccalaureate education seemed more appropriate for developing critical thinking skills for nursing.

The mission statement (1991) for the university reflects commitment to produce students that have good production whether in service oriented or industrial work. This commitment is necessary to meet community expectations of the university product and plans have begun to add new associate of applied science degrees reflecting needs expressed via a community survey completed during the fall of 1992.

Data to support this visionary change, i.e. a pedagogy shift, can be reviewed in Appendixes A and B, and include a SWOT (strength, weakness, opportunity, and threat) analysis and projected time line for the decade of the nineties. This particular project will be for three years.

Strategic Plan

Goals and Objectives

External Environment

1. Government and Community

Goal 1: To prepare nursing graduates to meet community employer expectations.

Objective 1.1: Institution will submit request for desirable nursing characteristics to community employers.

2. Educational Factors

Goal 2: To promote student thinking abilities within the nursing department.

Objective 2.1: Present and encourage teaching strategies to enhance student reasoning (verbal and written).

Internal Environment

1. Services

Goal 1: The department will concentrate on student's skills and abilities, assessing final readiness for responsibility in the work-force.

Objective 1.1: Incorporate critical thinking skills in reading, writing, speaking, or listening into the nursing department and university curriculum for all degrees offered.

2. Human Resources Development

Goal 2: To promote faculty understanding and development in the teaching of critical thinking skills within the nursing curriculum.

Objective 2.2: Provide information (written and verbal) for faculty to increase the understanding and application of the concept critical thinking into each course throughout the nursing curriculum to include by year three the entire campus.

3. Governance, Coordination, and Finance

Goal 3: To incorporate technology into the classroom that *stimulates and supports critical thinking* (interactive video, computer assisted instruction, and computer assisted testing).

Objective 3.1: Seek alternate ways to finance purchases or incorporate sharing of technology that supports critical thinking.

Methodology

The methodology, or plan, to achieve the desired pedagogical shift, that of incorporation of critical thinking into the curriculum, will be divided into yearly segments for a total of three years. This is done to allow progression and evaluation. It is possible, should funding become available, that outside services will be sought to help orient a few faculty members in the art of adapting critical thinking into campus curricula. One such program located in California is available through the Institute of Critical Thinking with whom Dr. Richard Paul is associated. But, given the statewide budgetary constraints of the last two years this may not be realizable and other methodologies may be more practical for the time being. The conceptualized plan for this project is in its entirety in Appendix C.

Evaluation

Evaluation is for assessing progress, or accomplishment, of goals by methodology programed to achieve the objective(s) set out by broader goals. This section of the plan is divided into yearly accomplishments intending to culminate after three years with a restructured institutional curriculum, one that uses critical thinking and caring to enable all graduates in making moral and ethical decisions within the community.

Evaluation will be done on a yearly basis to keep the institution focused and progressing. The yearly evaluation will allow for adjustments to the general methodology should it become necessary or desirable.

Budget

No planned specific amount is devoted to achievement of the goals set forth in this plan. Projections will be stated should instructional funds become available for campus wide use to restructure the curriculum to incorporate critical thinking (Appendix C).

Conclusion

As nursing education progresses toward a standardized four year program within this state and across this nation the teaching of critical thinking skills seems necessary and prudent. Expectations of employers and a more acute patient acuity demand employees capable of providing effective, ethical, safe care using critical thinking skills.

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West Plains Campus-SMSU

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Name

SWOT ANALYSIS

STRENGTHS	Weaknesses	Opportunities	Threats
C 1. Newly remodeled library-new holdings	F 1. Budget cuts in last 2 years fiscal budget	P 1. 2 new faculty-new ideas	E 1. Loss of faculty due to low salary/lack of fac. development
P 2. Dedicated nursing faculty to develop students	C 2. Campus isolated, rural in poor economic area	T 2. Have grant money for new CAIs	T 2. Lack of finances to purchase newer technology- IAVs
A 3. Newly legislated Mission Statement	P 3. Faculty development budget very low	P 3. Accrediting agency changed criteria	D 3. Lack of follow-up after graduation
M 4. Cohesive university faculty/staff	A 4. Many students need reading remediation	E 4. Ability to network with parent campus continuing ed. dept.	S 4. Lack of cooperation with community employers
A 5. Able to add new Associate of Applied Science Degrees	C 5. Commuter campus No housing	D S 5. Mean age = increased life experiences	
A M 6. Campus wide commitment to excellence & critical thinking	A 6. No curriculum plans include critical thinking	P 6. Seeking separate accreditation from NCAA	

Strengths & Weaknesses	Opportunities & threats	Strategic Options	Tactical Alternatives
A = Academic	D = Demographic	1 Higher Quality	1. Test/screen for critical thinking
C = Capital (Plant, Equipment)	E = Economic	5 New Stud. Clientele	2. Improve teacher learner interaction to foster crit. thinking
F = Financial	S = Social	2 Public Service	3. Review learning methods
M = Managerial, Organizational	P = Politicalf	3 Research	4. Lit. review-determine changes necessary
P = Personnel	T = Technological	4 Retrenchment	
		1 = High 5 = Low	

Appendix A

Appendix B

Vision 2000: A Pedagogy Shift, Critical Thinking, and Caring

	1990 1995 2000
Organizational Structure	* School celebrates 25th. anniversary * New Mission Statement legislated * Seeking CBHE approval-new applied science degrees * Seeking separate NCAA accreditation * Library holdings >, building renovated * 1st. graduation on campus * Active Development Board * Most faculty-doctorates
Demographics	* Increasing university enrollment * Enrollment continues to increase- up 15% * Majority of students female- 73% * Female dominated enrollment continues * Majority of students married- 58% * Majority of students under age 25- 56% * Male nursing students increase- up 6% * Child care for students needed * Increase in single parent student population * Increased need for voc./technical applied science degrees * Attempt to increase minority enrollment
Social	* 80-90% of students receive financial aid * Increase in nontraditional student activities * Increase in student financial aid requests * Allied health career choice up * Attempt to establish campus sports * Nursing student elected to student government * Yearly university/community barbecue held * University/community barbecue tradition now
Political	* Credentialing controversy for advanced practice RN * Some form of National Health Care plan introduced with new administration in government * Political party change in state government * Attempt to establish one Board of Regents for state schools * More women showing interest in political office holding

Appendix B (continued)

1990 — 1995 — 2000

Economics

- University budget cut by governor - 5.5%
- University budget cut by governor - 9%
- Lowest paid school for FTE using state formula
- 59% of nursing graduates work within 7 county areas
- Nursing students using degree for upward mobility
- Salary equity for RNs improving
- Faculty development resources scarce
- Project less dependence on welfare as more applied science degrees available

Technology

- More computer use in nursing program- CAIs
- Increased technology demands critical thinking RN
- Technology will continue to influence teaching
- State Board exam is computerized
- High tech and right to die conflicting
- Fiber optics contribute to distance education
- Technology increases quality of education as clinical sites shrink

Education

- Business/university student internships established
- More demand for applied science degrees
- Increased partnerships of university and vocational/technical schools
- Distance learning using high tech equipment becoming common place
- Universities sharing nursing faculty with hospitals to offer competitive salary
- Nursing programs searching for alternative clinical sites

Values

- Keen community religious values
- Increased need for ethics & law in nursing curriculum
- Value clarification important in nursing curriculum
- Lifestyle/family composition changing
- Less guilt when student cheats- many do
- Need to improve valuing/nurturing/critical thinking ability
- Multicultural nursing a reality--Prejudice still unresolved

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External Environment
Government & Community

Goal 1: To prepare nursing graduates to meet community employer expectations.

Objective 1.1: Institution will submit request for desirable nursing characteristics to community employers..

Year One

Methodology:

Send National League for Nursing (NLN) list of graduate ADN nurse capabilities to local employers for evaluation.

Ask for information from employers regarding graduate critical thinking (CT) & problem solving capability.

Provide faculty information (written/verbal) on use of CT skills in the classroom.

Year Two

Methodology:

Faculty begins to compare employer information input with terminal program objectives and NLN graduate characteristics to see what curriculum changes or reinforcement might be needed.

Have brown bag lunches allowing nursing faculty to explore ways of introducing or supporting use of CT in class.

Share information on campus.

Year Three

Methodology:

Prepare tool for reassessing employers evaluation of CT skills of graduates.

Stabilize teaching techniques that support CT skills.

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Year One	Year Two	Year Three
Evaluation:	Evaluation:	Evaluation:
Faculty develop list of CT characteristics to send with NLN list to employers within seven counties served.	Nursing curriculum is evaluated for CT using employers survey information.	Reassessment of local employers reveals graduates meeting at least 50% or more of employer expectations.
Nursing faculty receptive to written & verbal information about CT characteristics.	Brown bag luncheons well attended & teaching methodologies designed using CT.	Teaching methodologies stabilized & supportive of CT.
	Progress using CT in classroom shared with general faculty at scheduled meeting.	Faculty at ease with curriculum change.
Budget:	Budget:	Budget:
Printing and postage for community employer survey. Estimate: $200-300.	Obtain video & written material about CT, or try to send some faculty members to seminar. Estimate: $2000-3000.	Printing & postage for reassessment survey. Estimate: $200-300.
Staff salary for time preparing forms for survey. Estimate $40.		

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External Environment
Educational Factors

Goal 2: To promote student thinking abilities within the nursing department.

Objective 2.1: Present and encourage teaching strategies to enhance student reasoning (verbal & written).

Year One	Year Two	Year Three
Methodology:	Methodology:	Methodology:
Involve nursing faculty in development of vision to incorporate CT and caring into curriculum.	Advertise brown bag luncheons to share techniques & progress with other nursing faculty.	Stabilize effective techniques found in nursing department for new faculty.
Seek information from business involved in teaching/researching CT skills.	Promote use of computer assisted instructional programs.	Apply for grant money to buy computer & interactive video equipment enhancing CT skill.
Use standardized screening test to find out reasoning & judgment ability upon application to nursing program.	Evaluate course syllabus incorporating CT skills during semester curriculum review.	Reward students using CT skill and caring attitude in clinical.
	Design tests and written assignments geared to enhancing CT skills.	Retest for reasoning & judgment ability using standardized test.

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External Environment
Educational Factors
Goal 2- Objective 2.1 continued.

Year One	Year Two	Year Three
Evaluation: Students are receptive to change in pedagogy using CT and caring.	Evaluation: Faculty comfortable & supportive incorporating CT & caring into nursing assignments.	Evaluation: Student test scores for CT tests show improvement.
Budget: Giving standardized test to students (35 x $12=$420 + postage & handling to score=$500).	Budget: Projected $2000-3000 for new CAIs.	Budget: Student retesting- $500.

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Internal Environment
Services

Goal 1: The department will concentrate on student's skills & abilities, assessing final readiness for responsibility in the work-force.

Objective 1.1: Incorporate critical thinking skills in reading, writing, speaking, or listening into the nursing department & university curriculum for all degrees offered.

Year One	Year Two	Year Three
Methodology:	Methodology:	Methodology:
Develop CT skills in each course syllabus.	Reinforce respect for cultural diversity using common skills & abilities.	Develop common thread of CT in each course taught on campus.
Nursing faculty should clearly express (oral & written) expectations of CT problem solving ability.	Begin sharing information with other campus faculty-full-time & adjunct.	Allow for rewriting of assignments in courses lending themselves to such practice.

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Internal Environment
Services
Goal 1- Objective 1.1 continued.

Year One	Year Two	Year Three
Evaluation: Students are able to participate in small or large group problem solving exercises comfortably.	Evaluation: Less stereotyping occurs and more respect demonstrated when discussing work-force decisions involving cultural diversity.	Evaluation: Campus wide acceptance of culturally diverse common CT skills across the curriculum.
Budget: No allocation needed.	Budget: No allocation needed.	Budget: No allocation needed.

Internal Environment
Human Resource Development

Goal 2: To promote faculty understanding & development in the teaching of CT skills within the nursing curriculum.

Objective 2.1: Provide information (written/oral) for faculty to increase understanding & application of concept CT into each course throughout nursing curriculum-campus by year 3.

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Internal Environment
Human Resource Development
Goal 2- Objective 2.1 continued.

	Year One	Year Two	Year Three
Methodology:	Plan for some faculty members to attend seminars at the CT Institute in California. Investigate research involving nursing and CT skills.	Introduce form for student self analysis of CT skills in nursing department first, then campus. Share research findings on CT with nursing faculty.	Use campus faculty workshops to practice or share CT skills information gained at seminar (if able to attend).
Evaluation:	School will dedicate money for CT project. Schools involved in research of CT skill development will share or explain published results.	Students receptive to assessing own CT skills.	Campus wide sharing of CT skill development enthusiastically attended.
Budget:	Seminars- $2000-2500 estimated. Library search- no allocation.	No allocation projected.	No allocation projected.

VISION 2000: A PEDAGOGY SHIFT-CRITICAL THINKING AND CARING
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SOUTHWEST MISSOURI STATE UNIVERSITY-WEST PLAINS

Internal Environment
Governance, Coordination, & Finance.

Goal 3: To incorporate technology into the classroom that stimulates & supports CT (interactive video, computer assisted instruction, & computer assisted testing.

Objective 3.1: Seek alternate ways to finance purchases or incorporate sharing of technology that supports CT.

	Year One	Year Two	Year Three
Methodology:	Seek tools/media assessing nursing judgment & CT skills. Investigate media supporting CT skills at parent university.	Encourage literature review of research about CT. Form committee-preview media for HRD CT skills development.	Dept. Heads & faculty review CT syllabus construction yearly. Share using CT in course syllabus at faculty orientation.
Evaluation:	CT & general skills developed.	Network with parent campus to share media holdings	Fac. gives positive reinforcing to each Division.
Budget:	No projected allocation.	$1500 each- fac. development.	No allocation projected.

January 4, 1993

I, Juanita J. Roth, grant permission to Dr. Warren Groff to use my paper completed for the Nova Human Resources Development class for instructional purposes.

Juanita J. Roth

Rita C. Turpin